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STATUS OF FEDERALLY CONDUCTED AGENT ORANGE STUDIES

HEARING

BEFORE THE

SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES

NINETY-EIGHTH CONGRESS

FIRST SESSION

MAY 3, 1983

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CONTENTS

MAY 3, 1983

Page

Status of Federally Conducted Agent Orange Studies 1

WITNESSES

Chesney, Maj. Gen. Murphy A., Deputy Surgeon General, Department of the Air Force 39
Prepared statement of General Chesney 141
Custis, Dr. Donald L., Chief Medical Director, Veterans' Administration 28
Prepared statement of Dr. Custis 129
Doran, Jeff G., chief staff assistant, Select Committee for the Study of Veterans' Affairs, House of Representatives, State of Tennessee, accompanied by Hon. U. A. Moore and Hon. Ralph Yelton, Tennessee House of Representatives 3
Prepared statement of Mr. Doran 79
Downey, Hon. Thomas J., a Representative in Congress from the State of New York 19
Prepared statement of Congressman Downey 127
Houk, Dr. Vernon N., Director, Center for Environmental Health, Centers for Disease Control, Public Health Service, Department of Health and Human Services 7
Prepared statement of Dr. Houk 123
Kull, Bart, Special Assistant to the Deputy Under Secretary for Governmental Affairs and Special Assistant to the Chairman, Agent Orange Working Group, Department of Health and Human Services, accompanied by Dr. Carl Keller, senior epidemiologist, National Institute of Environmental Health Sciences, National Institute of Health 7
Prepared statement of Mr. Kull 122

MATERIAL SUBMITTED FOR THE RECORD

Comments: Ambassador Robert Cotton, Embassy of Australia to Chairman Montgomery, re clarification of Agent Orange disability claims in Australia. 49
Fact sheet: Update on Agent Orange, submitted by Dr. Peter E. M. Beach, Director of Veterans' Affairs, Department of Health and Human Services 57
Reports: "Improvements Needed in VA's Efforts to Assist Veterans Concerned About Agent Orange," August 6, 1982, GAO draft report, VA views on 135
Statements:
Sommer, John Fr., Jr., deputy director, National Veterans' Affairs and Rehabilitation Commission, The American Legion 71
Terzano, John F., legislative director, Vietnam Veterans of America 145
Study: "Select Committee for the Study of Veterans' Affairs" State of Tennessee 82
Written committee questions and their response:
Chairman Montgomery to Dr. Vernon Houk, Director, Center for Environmental Health, Centers for Disease Control 126
Chairman Montgomery to Veterans' Administration 140
Chairman Montgomery to Maj. Gen. Murphy A. Chesney, Deputy Surgeon General, U.S. Air Force 144
Hon. Lane Evans to Maj. Gen. Murphy A. Chesney, Deputy Surgeon General, U.S. Air Force 144

STATUS OF FEDERALLY CONDUCTED AGENT ORANGE STUDIES

TUESDAY, MAY 3, 1983

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 8:30 a.m. in room 334, Cannon House Office Building, Hon. G. V. "Sonny" Montgomery (chairman of the subcommittee) presiding.

Present: Representatives Montgomery, Penny, Rowland, Evans, Hillis, Burton, and Sundquist.

OPENING STATEMENT OF CHAIRMAN MONTGOMERY

Mr. MONTGOMERY. Good morning, the subcommittee will come to order. We are meeting this morning to receive testimony from Members of Congress, the Veterans' Administration, the Department of Health and Human Services, and the Department of the Air Force on the current status of federally conducted agent orange studies, as well as the State of Tennessee's Select Committee on Veterans' Affairs on studies they have recently completed.

As you know, at the direction of this committee, the epidemiological study on the effects of exposure to agent orange mandated by Public Law 96-151, has been transferred from the Veterans' Administration to the Centers for Disease Control. I want to emphasize that the transfer of responsibility for the study from VA to CDC was in no way a reflection upon the VA's ability to conduct such a study, but simply was based upon the belief that the results of the study, if conducted by an entity with no responsibility over veterans' benefits and services, would be more readily acceptable by the veterans who may be affected. However, the VA is continuing to be heavily involved in the overall picture, and we are particularly interested in the progress of VA's twin and mortality studies, as well as the joint EPA/VA retrospective study of dioxins and furans in adipose (fatty) tissue of Vietnam veterans. Also of interest is the Ranch Hand study conducted by the Air Force, which is now in its final stages. We will hear from the Centers for Disease Control on their progress. It should be pointed out that the final agreement between VA and CDC was signed on January 14, 1983, so CDC hasn't had a great deal of time to implement their actions to commence the study.

Before hearing from our witnesses, I request that a letter, with enclosures, I recently received from the Australian Ambassador to

the United States, Sir Robert Cotton, be made a part of the hearing record.[1] Ambassador Cotton's letter refers to this subcommittee's hearing of September 15, 1982, concerning agent orange, and reports that the Department of Veterans' Affairs in Canberra, in reading that hearing record, noticed that the statement of Mr. Lewis Milford of the National Veterans Law Center indicates a significant misunderstanding of the Australian Government's action in regard to agent orange.

Mr. Milford stated that 70 percent of veterans from Australia have had their claims granted on the basis of agent orange. The Ambassador's letter explains that some 70 percent of claims made by veterans of all conflicts in the Australian repatriation system are successful, and further explains that of the 478 claims accepted which mention possible exposure to chemicals, not agent orange alone, only one was accepted on chemical exposure grounds. If there is no objection, the letter will be made a part of the hearing record. A copy of Ambassador Cotton's letter has also been placed before each subcommittee member.

Additionally, if there is no objection, I would like to include in the hearing record a memorandum of February 24, 1983, from Dr. Peter M. Beach, staff director of the agent orange working group, listing Federal research on agent orange,[2] as well as a statement submitted by the American Legion.[3]

I would like to recognize the gentleman from Tennessee, Mr. Sunquist, who is certainly a fine member of this subcommittee as well as the House Veterans' Affairs Committee. I appreciate very much him coming to my State recently where we conducted hearings on different issues affecting veterans. The Chair would like to recognize the gentleman from Tennessee.

Mr. SUNDQUIST. Thank you, Mr. Chairman.

I would like to commend you for your leadership on this committee. We were visiting a few minutes ago and these folks were bragging on the Veterans' Committee and your leadership. I just totally agree with that.

Mr. MONTGOMERY. Thank you.

Mr. SUNDQUIST. Mr. Chairman, I would like to introduce some distinguished people from Tennessee. It is privilege for them to be here today. First of all, our Commissioner of Veterans' Affairs, the Honorable William "Dusty" Roden, commissioner, Tennessee Department of Veterans' Affairs. To his left is Representative Ralph Yelton who represents Sullivan County and several other counties, but his home is in Sullivan County. I also want to introduce an old lifetime friend of mine, Representative U. A. Moore, Shelby County. And then Mr. Jeff Doran, who is the chief of staff assistant for the Tennessee Select Committee on Veterans' Affairs.

Mr. Chairman, I appreciate you allowing them to be here and testify today.

Mr. MONTGOMERY. Thank you, Don. I have a warm interest in Tennessee, living close to Tennessee and having the privilege of going to the McCallre School for 3 years in Chattanooga. I have a

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[1] See p. 47.
[2] See p. 57.
[3] See p. 71.

nice warm feeling for Tennessee. I enjoyed seeing "Dusty" in Memphis when we had a hearing there last year.

You may proceed as you wish. We have the same problems that other subcommittees have. If you could summarize your statements, your full statements will be put in the record.

STATEMENT OF U. A. MOORE, A STATE REPRESENTATIVE, HOUSE OF REPRESENTATIVES, STATE OF TENNESSEE, ACCOMPANIED BY RALPH YELTON, STATE REPRESENTATIVE, HOUSE OF REPRESENTATIVES, STATE OF TENNESSEE; WILLIAM H. RODEN, JR., COMMISSIONER, TENNESSEE DEPARTMENT OF VETERANS' AFFAIRS; AND JEFF G. DORAN, CHIEF STAFF ASSISTANT, TENNESSEE COMMITTEE OF VETERANS' AFFAIRS

Mr. MOORE. Thank you, Mr. Chairman.

It gives me great pleasure and honor to appear before this committee today. This is my second time to appear before this committee, and we were treated with the kind of treatment that every individual representing veterans has been treated in the past.

First, I would like to extend my appreciation to you for allowing us this time to share with you our findings of a comprehensive study relating to agent orange. As a member of the Tennessee House of Representatives and the Select Committee on Veterans' Affairs, it gives me great pleasure to appear before you today on behalf of the State of Tennessee and those special people in our State, the veterans.

To my left, who will continue this report, is Jeff Doran, chief of staff for our committee. At this time, I would like for him to continue this report for the committee.

Mr. DORAN. Good morning. I am pleased to be here today to discuss with you findings of Tennessee's study on agent orange and to make recomendations as a result of that study.

In my remarks today, I will provide you with a summary of testimony as recorded by the committee during the course of our study relative to dioxin and problems encountered by veterans in obtaining medical treatment for perceived herbicide-related illnesses.

For the initial testimony, the Select Committee on Veterans' Affairs learned that Vietnam veterans had experienced health problems which they felt were linked to exposure to agent orange. Of those veterans examined at various VA medical centers, many reported suspected herbicide-related illnesses, including cancer, birth defective offspring, liver dysfunction, and a number of other physical ailments and psychological disorders. Many veterans had fathered children born with birth defects and others testified they were victims of liver damage, kidney problems and delayed stress syndrome. Wives of Vietnam veterans also reported miscarriages and/or hysterectomies.

Another issue brought to our attention was the quality of medical assistance available for veterans and their families. Instances of discourteous staff and lengthy waiting periods for medical care were mentioned. Other instances concern the dispensing of drugs imprudently, which veterans felt were ploys to keep them away from the VA medical centers for extended periods of time. The availability of medical services for children born with birth defects

was a major concern. As many veterans testified, they simply could not afford the medical treatment necessary to care for those children.

Another problem area was the location and availability of medical records. Veterans told committee members that they had tried repeatedly to locate their medical records without success.

Research and laboratory tests to determine the significance of herbicide and exposure of such to humans were areas of concern felt most needed by veterans. They desire answers to questions that only scientific research can answer, and they believe that, with the scientific research and the laboratory facilities available today and the commitment of sympathetic physicians, that these answers can be obtained.

Finally, veterans feel they are being ignored by their Government. They want the Government to fund research studies to determine the physical effect of herbicide exposure and to make these facts known. The VA should be recognizing other health problems since many of the same symptoms have occurred in a sizeable number of Vietnam veterans.

From the committee's study of the disturbing allegations made with regard to health hazards experienced by Vietnam veterans, the committee has determined the following recommendations:

We recommend that initiated research efforts by the Veterans' Administration designed to find answers to the many questions surrounding dioxin and other herbicides be continued to allow veterans this service of care and research at the hands of the Federal Government. Since the Veterans' Administration is the Government agency for services to our Nation's veterans, it seems only appropriate that medical research and efforts to determine the significance of dioxin and agent orange be left to the sole control of the Veterans' Administration.

Second, we recommend that the budget for the Veterans' Administration be fully funded to allow the Veterans' Administration to move in a more expeditious manner in research and laboratory testing relative to possible adverse health effects in those exposed to potentially dangerous herbicides.

Third, we recommend that in this money appropriated by Congress, that the agent orange examinations being administered by the Veterans' Administration be fully funded to allow these veterans an opportunity to seek medical assistance for conditions related to agent orange.

Four, we recommend that the Veterans' Administration medical centers' personnel be more sensitive to the physical and psychological needs of veterans who claim exposure to agent orange and be empathetic with these needs as veterans are examined, treated and counseled, and work to establish more positive rapport with the veterans who seek such medical assistance.

In conclusion, Mr. Chairman, the committee believes there must be a concerted and coordinated effort by State and Federal governments to maintain the quality of service and programs traditionally awarded to those who have borne the battle. We believe the Veterans' Administration must take a more aggressive stance in addressing this issue of possible adverse health effects on American

service personnel from agent orange or other herbicides used in Vietnam.

We believe the State, through efforts of government committees and cooperation with the Veterans' Administration, can listen to the many problems that confront our State's veterans and possibly offer veterans a more direct explanation of the government's involvement in research and the programs related to agent orange.

Finally, we believe that, through these combined efforts of both the State and Federal governments, Tennessee and the United States can continue its commitment to those who served our country in time of war.

Thank you very much.

[The statement of the Tennessee delegation appears on p. 79.]

Mr. MONTGOMERY. Thank you, Mr. Doran.

Mr. Sundquist, do you have any comments or questions?

Mr. SUNDQUIST. Mr. Chairman, I would just like to thank these gentlemen for being here today. I want to assure them that their full testimony will be made part of the record. Thank you.

Mr. MONTGOMERY. Thank you.

Before recognizing Mr. Penny and the other members of the subcommittee, let me ask the members of the legislature to tell my good friend, Ned Ray McWherter, the speaker of the house, hello and that we asked about him. He often comes to our State and also comes up here a great deal.

How did the State of Tennessee become involved in the agent orange issue—quite frankly, more than any other State, as far as I can determine?

Mr. MOORE. Let me direct that to Commissioner Rhoden, who has been on top of that problem.

Mr. RHODEN. Mr. Chairman, I think this primarily came about because of some veterans, particularly in the eastern Tennessee area, who felt that they were victims of various types of maladies attributed to agent orange, contacted their members of the general assembly and my office and asked that there be some opportunity for them to express their concerns and their conditions.

Mr. I. V. Hillis, a member of the committee, a representative from Sparta, Tenn., convened the committee in Rogersville, and then there were subsequent hearings in Donelson in the Nashville area, and then also at the Legislative Plaza in Nashville, which these people attended. We had, I would say, 200 to 300 people at the Rogersville meeting. The meetings in Nashville were not quite so well attended with numbers, but the information given to them was very significant.

So it came from a concern that was expressed to our legislature and the Select Committee on Veterans' Affairs, particularly in the House of Representatives. Our State has been very active in veterans' affairs for some 8 years, and it was in response to this inquiry.

Mr. MONTGOMERY. As I understand it, you are requesting from this subcommittee and the Veterans' Affairs Committee of the House of Representatives in the U.S. Congress that the Government move ahead on research in this area; is that basically correct? You are not doing any research yourself in Tennessee, are you?

Mr. RHODEN. No, sir; nothing other than taking the information and passing it along and sharing it with our VA medical centers. What our concern is that there be a concerted effort by the Veterans' Administration with all capabilities at the Federal and State level to do the research. But we are not doing any pure research ourselves with regard to this.

Mr. MONTGOMERY. Thank you.

Mr. Penny.

Mr. PENNY. Thank you, Mr. Chairman.

I am delighted to have the legislators from Tennessee and their staff with us this morning. As a State senator in the Minnesota Legislature, I was involved with the establishment of an agent orange referral program at the State level. I want to commend you for your interest in this very important issue. I understand that in addition to your encouragement that we continue strong efforts for funding agent orange research, you are also supportive of some type of assistance in their expenses for medical examinations for people who feel they are a victim of exposure to agent orange. There is legislation pending before our subcommittee here that does speak to the issue of compensation for agent orange victims until such time as the study is complete.

I wonder, if you have had a chance to review that legislation? Would you like to comment here about your feelings on that particular bill?

Mr. RHODEN. I am not familiar with the entire content of it. I think there is a very basic concept and principle on which the Veterans' Administration is operated. I think those of us who are professionals in the field feel very strongly that this must be continued, and that is that there must be scientific evidence that would support any kind of a program on a permanent basis for remedy. Otherwise, I think we will completely destroy the scientific basis on which our Veterans' Administration compensation and medical care program has been established.

But there is a great concern to which you are addressing on the part of these young men—there are some young women involved—but a great deal of concern on their part in not knowing. I think that is more of a concern than the matter of their being compensated. I think they are looking for more information, and certainly they are looking for medical attention.

As indicated in our report, many of these people are poor people who do not have the resources to provide for their children whom they feel may be affected as a result of their exposure. These are the things to which we would direct your attention.

Mr. MONTGOMERY. Another area that I think you recommended in your report is that the Veterans' Administration certainly does a good job in examining these young men and women who might have been exposed to agent orange in the veterans hospitals. Dr. Custis, who is Chief Medical Director of the Veterans' Administration, will talk to us further about this examination and testing of these veterans who have had exposure to agent orange.

I would like to thank you on behalf of this committee.

Mr. Hillis, the ranking minority member of this subcommittee, was delayed, but is here now. Mr. Hillis, I would like to recognize you at this time.

Mr. HILLIS. I want to thank all of you gentlemen for taking the time to come up and sharing your experience with us. We are very concerned of course about agent orange This committee is trying to look everywhere we can to sift out the scientific bases and evidence and to reach conclusions that can help us solve some of the problems that may be associated with it.

I certainly appreciate you all taking the time to come up here and share your experience with us.

Mr. MONTGOMERY. Thank you, Mr. Hillis.

Also, it seems that before we finish reaching some conclusions on agent orange, that the Federal Government would have spent more than $100 million to get to the bottom of this situation. So I think the funding will be there. You requested there be enough funding to come up with a good research on this.

The problem is that it just takes a lot of time. We were a little late getting started, but it seems now that these studies are moving ahead.

Thank you very much for being here this morning.

Mr. MOORE. Thank you, Mr. Chairman. We do appreciate this committee for the job that they are doing. It helps us out quite a bit to know you are here. Thank you.

Mr. MONTGOMERY. Thank you. We are going to take care of the veterans as long as we operate up here.

Mr. MOORE. Thank you, sir.

Mr. MONTGOMERY. I would like to invite to the witness table Mr. Bart Kull, Special Assistant to the Deputy Under Secretary for Governmental Affairs, Department of Health and Human Services.

Mr. Kull, we will let you introduce these other persons with you this morning.

STATEMENT OF BART KULL, SPECIAL ASSISTANT TO THE DEPUTY UNDER SECRETARY FOR GOVERNMENTAL AFFAIRS AND SPECIAL ASSISTANT TO THE CHAIRMAN, AGENT ORANGE WORKING GROUP, DEPARTMENT OF HEALTH AND HUMAN SERVICES, ACCOMPANIED BY CARL KELLER, SENIOR EPIDEMIOLOGIST, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES, NATIONAL INSTITUTES OF HEALTH; VERNON HOUK, DIRECTOR, CENTER FOR ENVIRONMENTAL HEALTH, CENTERS FOR DISEASE CONTROL; J. DAVID ERICKSON, DIRECTOR, CENTER FOR ENVIRONMENTAL HEALTH; AND WILLIAM E. HALPERIN, NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

Mr. KULL. Thank you very much, Mr. Chairman and members of the committee.

I am Bart Kull, Special Assistant to the Acting Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services. I am also assistant to the acting chairperson of the agent orange working group of the cabinet council on human resources.

I am very pleased to appear before the subcommittee to report on the activities of the agent orange working group.

With me, to my left, is Dr. Carl Keller, Senior Epidemiologist with that National Institute of Environmental Health Sciences of

the National Institutes of Health, and chairman pro tempore of the agent orange working group's science panel.

Dr. Keller, a long-term member of the working group's science panel is serving as chairman pro tempore of the panel to insure the uninterrupted flow of activities by the panel until a permanent chairperson is designated.

The former chairman of the science panel, Dr. Vernon Houk, to my right, Director of the Center for Environmental Health of the Centers for Disease Control, has stepped down from the chairmanship. Although he remains an important member of the science panel, he proposed and it was agreed, that with the recent transfer of the responsibility for the conduct of the VA epidemiological study to the Centers for Disease Control, it would not be appropriate for him to remain as chairman because of the review responsibilities of the science panel and the major role taken in such reviews by the chairperson of that panel.

I understand that this committee is mainly interested in the status of various human research studies currently underway or in the planning stages.

Representatives of the various agencies involved in this research are present to provide reports on studies under their purvue. I will limit my remarks to an overview of those considerable research efforts.

Since my appearance here on September 15 of last year, the VA has agreed by interagency agreement signed January 13 and 14 that the CDC, the Centers for Disease Control, be provided the resources and the authority for the design, implementation, analysis, and scientific interpretation of the epidemiology study mandated by Congress under section 307 of Public Law 96–151, as amended.

The Office of Management and Budget has approved the hiring of personnel by CDC for fiscal year 1983 for these purposes. The preparation of a protocol for the study is well underway.

Data collection for the CDC birth defects study will be completed by the end of this year with preliminary analysis expected shortly thereafter. The representative from CDC will provide the committee with much greater detail on these topics.

Similarly, the CDC/NIOSH dioxin registry of U.S. Production Workers is proceeding on schedule. The establishment and maintenance of an international registry of similar workers in other countries appears feasible. The National Institute of Environmental Health Sciences will meet with the principal investigator from the International Agency for Research on Cancer, as well as a scientific advisory group, on May 20. The purpose of that meeting will be to decide whether to begin work on the development of the actual international registry and of a protocol for an epidemiology study derived from cohorts obtained from that registry. It is anticipated that this will be approved. This registry will be compatible with the NIOSH Dioxin Registry, thus improving the numerical power of mortality and other data.

The National Cancer Institute is conducting a case control study of lymphoma and soft tissue sarcoma to test the association between the use of herbicides and the incidence of lymphoma and soft tissue sarcoma among agricultural applicators in the State of Kansas. The interview phase of this study is 50 percent complete

and should be 100 percent complete by the end of September with final results expected by the spring of next year.

Additional studies are being conducted by the States of Minnesota and Iowa where insecticides are generally applied simultaneously with herbicides to corn and other crops. A similar case control design is being employed in these areas to compare pesticide exposures in general among cases of leukemia and lymphoma and suitable controls. Although information will be obtained on herbicide use, we may not be able to separate possible effects of exposure to herbicides alone from those exposed to herbicides and other pesticides. Results of these studies should be available in late 1984.

The Veterans' Administration is engaged in a number of studies on agent orange exposure and the Vietnam experience. For instance, a mortality study is well underway to analyze and compare death rates and cause of death between veterans with service in Vietnam and comparable veterans who did not serve there. Also, the Veterans' Administration is planning a study of identical twins in which one twin served in Vietnam and the other did not. VA expects to have its protocol completed, including peer review, by October. As you know, the VA is engaged in other registry and research work, including the agent orange registry and dioxin-in-fat-tissue studies. The representative from the Veterans' Administration will elaborate on these topics shortly.

The mortality data from the Air Force ranch hand study will be released soon. Data should be available for public release after review by the Advisory Committee next month. It will be followed with morbidity data later this year. Air Force Gen. Murphy Chesney will be providing detailed testimony on this today.

Finally, following the recent departure of James Stockdale, chairman of the agent orange working group, Ms. Kae Rairdin has been appointed Acting Deputy Under Secretary for Intergovernmental Affairs and acting chairperson of the working group.

Secretary Heckler is seeking a permanent replacement to fill these important positions. Having served with Mrs. Heckler on this committee, you know, I am sure, of her genuine longstanding concern about this issue and the fact that, as a member of the Cabinet, she considers it to be of high priority.

In the meantime, research, the oversight of research, contacts with Members of Congress, the public and the veterans groups and the general flow of information has continued on an uninterrupted basis.

I appreciate this opportunity to provide this introduction, and would be happy to respond to any questions.

Mr. MONTGOMERY. Why don't we hear from Dr. Houk, and then we will go into questions, if there is no objection.

Dr. Houk has been here before. If you could summarize your statement, it would help us very much.

Dr. HOUK. Thank you, Mr. chairman and members of the subcommittee.

I am Dr. Vernon Houk, Director of the Center for Environmental Health. I am accompanied by Dr. David Erickson, director of the CEH's agent orange projects; and Dr. William Halperin of the National Institute for Occupational Safety and Health.

I am pleased to be here this morning in response to your request for testimony regarding the plans for the Centers for Disease Control's conduct of the epidemiological study mandated by Public Law 96–151, as amended, regarding agent orange that the work CDC's NIOSH has done in evaluating the health of workers who may have been exposed to dioxin, the major toxic contaminant of agent orange.

I appeared before this subcommittee as chair, science panel, agent orange working group on September 15 of last year. Since the matter of CDC's involvement in the epidemiology study was mentioned at those hearings, CEC began consideration of the issue then. We determined as early as the first week of October that, if called upon and provided with appropriate resources, it could design and conduct a scientifically sound study. On October 22, the HHS Assistant Secretary for Health, Dr. Ed Brandt, met with the VA's Medical Director, Dr. Custis, to begin discussions of transferring the responsibility of the study to CDC.

On October 27, I asked Dr. Paul Weisner, Director of the Chronic Diseases Division and also Assistant Director for Medical Affairs of the Center for Environmental Health, to assign staff and resources to start work on development of a scientifically acceptable protocol outline along the lines of other epidemiological investigations conducted over the years at CDC. Dr. David Erickson agreed to chair a task group of experienced medical epidemiologists and biostatisticians from among CDC staff. They were aided by a VA senior staff person loaned to us to give the CDC group firsthand information about the previous work in the area. The task group held its first meeting on November 1, 1982. During the first few days of November, its members traveled extensively to several cities to meet on the subject with the VA, Army, Air Force, National Institutes of Health personnel, and with the developers of the UCLA proposed protocol which had previously been submitted to the VA.

I must say that I am proud of the energetic manner in which our scientific staff attacked the task of developing a protocol outline. By November 8, they were meeting daily to complete the proposed outline, which was submitted by Dr. Brandt to the Veterans' Administration on December 6. The outline we proposed included two separate but related investigations—one to evaluate the proposed long-term health effects of exposure to U.S. ground forces to agent orange; the other to make an assessment of the possible health effects of service in Vietnam.

The protocol outline calls for the participation of 30,000 veterans, comprising of 5 cohorts, or groups, of 6,000 each. Three of these five cohorts will provide data for the agent orange study, and the three cohorts will be made up as follows: One cohort of veterans who served in areas of Vietnam where herbicides were used and who were likely exposed; a second cohort of veterans who, though serving in areas of Vietnam where herbicides were used, were unlikely to have been exposed; and a third cohort of veterans who served in areas of Vietnam where herbicides were not used. Data from the fourth and fifth cohorts will be used in other investigation of the possible health effects of the Vietnam experience. Of the two cohorts in this related study, one will comprise Vietnam era veterans

who served in Vietnam. The other will be made up of veterans who served during the same years but in other parts of the world.

Each of the two concurrent studies wil have three major components. First, a mortality assessment to determine which veterans may have died since being discharged and the cause of death; second, a health interview; and third, a comprehensive medical examination and laboratory assessment. This third component, the examination and laboratory work, will be provided to 2,000 men from each of the 5 cohorts. Although both of the concurrent studies will have several other features in common, the sampling plan, timetables, and some of the health outcomes measured in the interview and medical examinations will differ between the studies. They are designed to answer related but different questions of importance to Vietnam veterans and their families.

Because of the particular concern that Vietnam veterans may be at increased risk for contracting certain cancers, particularly soft tissue sarcomas and lymphomas, we have since proposed an additional study of this problem and its relationship, if any, to service in Vietnam. This addition has been approved by the Assistant Secretary for Health as a critical third element of the CDC agent orange epidemiology study and has been recommended by the Public Health Service to the Veterans' Administration for funding.

The choice of veterans for inclusion in the various study cohorts will derive from review of military records from the Vietnam era. Considerable work with records vrom Vietnam has already been done in consultation and cooperation with the Department of Defense—primarily staff of the Army agent orange task force—and the White House agent orange working group. CDC has assigned a staff member to work full time with the Army agent orange task force. We continue to be pleased with the energetic and dedicated work of the Army agent orange task force under the able leadership of Mr. Dick Christian.

In approving the interagency agreement with the Public Health Service on January 13, the Veterans' Administration accepted the agent orange exposure, as well as service in Vietnam studies concept, and committed to provide $3 million to CDC to initiate action to obtain OMB approval for 28 full-time staff positions during 1983 for the beginning phases of the studies, including the development of the comprehensive protocol.

Since early November, a small agent orange projects staff within the Center for Environmental Health has been preparing for the planned studies. We are now in the process of recruiting the appropriately qualified professional and support staffs for the continuing formative and implementation phases of the study. CDC is scheduled to have complete protocols, including one for our proposed soft tissue sarcoma and lymphoma case control study, ready for peer review and necessary policy and budget clearances by the end of May 1983.

Mr. MONTGOMERY. Dr. Houk, would you mind summarizing? Time is of the essence, not only for you, but for us. Take about 2 more minutes and summarize it, if you could. We try to keep a panel of witnesses to about 10 minutes. We have a good attendance here this morning, and I want the members to have an opportunity

to ask questions. If you could summarize it in about 2 minutes, it would be most helpful to the Chair.

Dr. HOUK. Yes, sir.

In addition to that study, the CDC birth defects study, which is funded by the Veterans' Administration and the Department of Defense is proceeding on schedule. As Mr. Kull said, we will have data collected for analysis very soon thereafter.

The NIOSH dioxin registry, which we reported on before to this committee, is proceeding. It is expected that a total of 6,000 people will be registered at the end of this year, and the analysis will begin. That analysis will be necessarily slow, as all of the effects in there.

As was mentioned by Mr. Kull, NIOSH sent an individual to IARC to determine the feasibility of including dioxin workers from 20 other countries. That was found to be feasible, and now the National Institute of Occupational Safety and Health is considering funding that on an international basis.

Along with the mortality in the Dioxin Registry, we will also very seriously consider using that registry for the analysis of other morbidity and other outcomes as necessary, depending upon the availability of the resources. It is important that that registry be looked at very carefully, because we have latency of exposures that date back to 1940.

I would like to conclude, then, if I may, by saying that in addition to the above studies, NIOSH continues to examine the reported association between dioxin and diseases in occupationally related workers. In 1977, cases of soft tissue sarcoma were identified in Sweden, and a Swedish epidemiologic study—two studies, in fact—showed an association. There were four small studies in this country that were reported to show no association. When those four studies were completed, put together and analyzed, the Swedish studies were corroborated. In addition, four more individuals dying of soft tissue sarcoma were found in the dioxin workers.

In summing this question up, I think that we can say that we that the information suggesting an association of soft tissue sarcoma in humans and exposure to dioxin products accumulating. Careful epidemiologic data are needed. The questions of an association of sarcomas and exposure to phenoxy acids and chlorophenols is being addressed in the NIOSH registry mortality study and the IARC study. In addition, other studies which you will hear about today are being conducted. Epidemiologic studies like these will further delineate this association.

In summary, we believe we are progressing very rapidly with the proposed VA epidemiology study that been assigned to us and that, coupled with all of the other studies and the very energetic efforts of the Federal Government and others, will help answer all of the questions we seek.

Thank you, Mr. Chairman. We will be happy to respond to any questions.

[The statements of Mr. Kull and Dr. Houk appear on p. 122.]

Mr. MONTGOMERY. Thank you, Dr. Houk.

I will just set the stage, if I can, and then recognize my colleagues. Basically, in the last couple of sentences you said that you think there are ample studies being conducted now through the dif-

ferent departments and private institution so that we can come up with some logical answer within a reasonable time on agent orange?

Dr. HOUK. Yes, sir, as we testified before, Mr. Chairman, there are several studies underway now that may give some preliminary answers at the end of this year and the middle part of next year.

Mr. MONTGOMERY. What are those at the end of the year, so we can get it for the record?

Dr. HOUK. Specifically, the agent orange study which will be shortly after the end of the year.

Mr. MONTGOMERY. Who is doing the agent orange?

Dr. HOUK. The birth defects study, we are doing that.

Mr. MONTGOMERY. You are doing that by the end of this year.

Dr. HOUK. By the end of this year, we will have collected all of the data, and the analysis will be out shortly.

I believe the preliminary data of Ranch Hand is going to be announced reasonably shortly.

Mr. MONTGOMERY. That is being done by the Air Force?

Dr. HOUK. By the Air Force.

Mr. MONTGOMERY. OK.

Dr. HOUK. The NIOSH registry of dioxin workers, the data input of the registry, will be completed, and we will look at that very carefully and trying to get some analysis out of that as quickly as we can.

Mr. MONTGOMERY. Who is doing that study, and what is the date on that?

Dr. HOUK. The NIOSH dioxin registry, the National Institute of Occupational Safety and Health.

Mr. MONTGOMERY. OK.

Dr. HOUK. The Veterans' Administration's proportionate mortality study, which I believe is scheduled for 1984—the end of 1984 or mid-1984. Maybe Dr. Custis can do that. He is going to provide very good information to this.

I believe the study that is going to be the longest in coming is the very complex VA epidemiology study which we are currently designing.

Mr. MONTGOMERY. Who is doing that?

Dr. HOUK. The CDC is doing that, Mr. Chairman.

Mr. MONTGOMERY. As I understand it, you have moved from Washington to Atlanta to conduct this study; is that correct?

Dr. HOUK. No. I have always been in Atlanta at the Centers for Disease Control—since 1968. In addition to my other duties, I was chairman of the science panel of the agent orange work group which brought me to Washington very frequently.

Mr. MONTGOMERY. That covers most of the studies.

Dr. HOUK. There is a host of various other studies around. The National Cancer Institute has studies looking at lymphoma, soft tissue sarcoma in herbicide workers. I am not sure precisely when that is scheduled to come out. But indeed a great deal of energetic rapid work by all of the government agencies is going forward to try to get this question answered.

Mr. MONTGOMERY. You feel comfortable, now that we have gotten these studies moving, that you can come up with some an-

swers within the year, and then several other studies will take much longer. How much longer will they take?

Dr. HOUK. We are scheduled to complete the epidemiology study which we are contracting with the VA by interagency agreement is scheduled for September of 1987. OTA believes that that is optimistic. We agree with that. We will do everything in our power to insure that that comes in. Many of the registries that are being set up, many of the other studies, initial results will be coming in and probably will be looked at periodically every 5 years or so to see if the results are different, are changing, or anything more could be gleaned from those studies.

Mr. MONTGOMERY. I have one question to Mr. Kull before yielding to my colleague, Mr. Hillis.

When do you plan on filling these positions that have been mentioned here, the vacancies now in this area?

Mr. KULL. Secretary Heckler, as I mentioned in my testimony considers this a very high priority. As I am sure you can understand, she has been deluged with a great deal of work since assuming the position as Secretary. But I am reasonably confident that at least the Deputy Under Secretary for Intergovernmental Affairs position will be filled momentarily. By momentarily, I mean within the next few days.

The Secretary, incidentally, has been to Vienna to the World Health Organization meeting—I believe it is World Health—for this entire week. We sort of expect that, on her return, she will probably take some action in that regard. She has an interest, naturally, because of her interest in this entire issue of finding and putting in place persons of a high level of competence. We feel that is very important that perhaps time be spent on that.

Mr. MONTGOMERY. We miss Mrs. Heckler being on the committee. So I wish you would express to her that we are sorry she can't be here today.

Mr. Hillis.

Mr. HILLIS. Thank you, Mr. Chairman.

I have two or three questions. First, Dr. Houk, in your testimony, you refer to these Swedish studies. You mentioned them here just a moment ago. Can you tell us if you know how many cases are involved that are under study in those particular studies?

Dr. HOUK. Let me ask my colleague, Dr. Halperin, to answer you, sir.

Dr. HALPERIN. There were several Swedish studies. In one, there were 52 cases of soft tissue sarcoma, of which 25 percent of the cases had phenoxy herbicide exposure. There is another study of 110 cases, and 13 percent of these cases had exposure. These cases are case control studies. The bottom line on them is that there was about a sixfold higher degree of exposure in the cases of soft tissue sarcoma than would have been expected.

Mr. HILLIS. I am not an expert on these types of matters. But for scientific purposes, are those representative numbers? Are there sufficient numbers involved here in these cases? Do you weigh them to be significant for scientific finding?

Dr. HALPERIN. The consistency of the results in Sweden is certainly impressive. On a technical basis, the excesses found were statistically significant. As is true of epidemiology, one looks for

consistency between results. I think that when you look at these results in combination with the reanalysis of the U.S. cohorts, there is accumulating evidence.

Mr. HILLIS. Recognizing that these studies are still going on, are there any preliminary conclusions that you could give us that might be helpful at this time to the committee?

Dr. HOUK. Mr. Hillis, epidemiologic studies do not demonstrate cause and effect. They demonstrate association. As I say—which is different than what I said last year, if you remember, Mr. Chairman—we now believe that data is showing an association between soft tissue sarcoma and exposure to dioxin contamination.

We need to further address that association very carefully to determine the other parts and to delineate that association as best that we can.

Mr. HILLIS. Mr. Kull, I understand on this same line, there are also studies taken by the National Cancer Institute to test the association between the use of herbicides and the instances of diseases among agriculture applications. This has been done out in Kansas and the result will be due in the spring.

Is there any preliminary information you can share with us on those?

Mr. KULL. The study to compare herbicide exposure among cases of lymphoma and soft tissue sarcoma is being conducted and a report of the findings is expected, as you mentioned, in 1984. I am not aware—and perhaps Dr. Carl Keller might be aware—of some preliminary information that has come forward. I am not personally aware of it.

Dr. KELLER. I have recently contacted one of the principal investigators in this study, and there is no preliminary information at this time. It is expected to be finished, the interviewing, by the end of this fiscal year, and sometime early in 1984, a report, whenever that analysis is completed.

Mr. HILLIS. Dr. Houk, how many people would you estimate are involved in various studies that are underway in this field at the present time, that would relate to what we are discussing here this morning?

Dr. HOUK. I could only relate to the numbers that we have. You mean study participants, not people working on the studies; is that correct, sir?

Mr. HILLIS. Yes. What kind of forces have we marshaled to work on the problem?

Dr. HOUK. As we said, the VA epidemiology study which is being planned is planned for 30,000 individuals. The birth defects study is designed to get 5,400 children with birth defects out of the Atlanta birth defects registry and compare them with 3,000 control babies born during the same period of time.

The intitial registry of the National Institute of Occupational Safety and Health will be about 6,000 individuals. In the IARC part of that will be maybe another 4,000 or a number similar to that.

The veterans twins study, which they can address better than I can, is, I think, 500 people. The veterans mortality study, if I remember correctly, will be around 60,000.

All of these studies, when put together, are really a very energetic examination of this issue.

I would like to make one comment. I recognize the desire for immediate information as soon as possible. But the way one insures that an epidemiologic study is biased is to start doing piecemeal analysis of preliminary results and try to push it up a little bit ahead of schedule. That will almost always bias studies.

Mr. HILLIS. I have one final question, Mr. Chairman.

Can you give the committee a figure of the costs of these various studies? In other words, how much we are putting into them of a monetary nature?

Dr. HOUK. I can only do the cost of the studies as they relate directly to the Centers for Disease Control, and allow the other witnesses before you do that.

The VA epidemiology study is estimated in the magnitude of $70 million, depending on how it is going to be done. The birth defects study is approximately $2.5 million to complete. The NIOSH dioxin registry is about $150,000, in addition to the work that they use of IARC, the staff time that has been continuing to analyse these informations.

Mr. MONTGOMERY. Thank you.

Mr. Penny.

Mr. PENNY. Thank you, Mr. Chairman.

Dr. Houk, are you satisfied with the budget and staffing allocation for fiscal year 1983?

Dr. HOUK. For the VA epidemiology study, we entered into an interagency agreement which the VA agreed to provide $3 million and agreed to request and help us get additional positions. The positions are the very critical issue with something like this. We have estimated that for this year, we needed 28 people, which comes down into 14 full-time equivalents because they were available only half the year. We just received permission for those 28 full-time positions on the eighth of April. We have been anticipating they will have the process going forward of hiring people, seeking out the best people that we can find for that.

The $3 million is enough for this year. In fact, we probably will not expend all of that, and we are making arrangements with the VA to still have that available to us in the following years, 1984 and the other years, where the big expenditures are going to come.

Mr. PENNY. I don't recall seeing an appropriation for the VA study on agent orange in the President's fiscal year 1984 request. Have you been working with the administration to get a supplemental request for fiscal year 1984?

Dr. HOUK. We have been working with the Veterans' Administration, and Dr. Custis can best answer how that process goes. It is my understanding that the request for both dollars and positions is in the Veterans' Administration, it was forwarded to them on April 17 by Dr. Brandt, and there were some preliminary discussions about the dollar amount before that time, that this is an adequate time for there to be a supplemental or an amendment or however the budget people feel.

Mr. PENNY. Can you give us a ballpark figure on the dollar amount for 1984.

Dr. HOUK. As I understand it, the preliminary studies are in the order of magnitude of $70 million for the 5-year period.

Mr. PENNY. OK.

The interagency coordination that is underway for this study, does that involve everyone, the Air Force, the Department of Health and Human Services, the Veterans' Administration? Is everybody tied in so that these various studies are all coordinated in some manner under that agreement?

Dr. HOUK. That is the purpose of the cabinet council interagency working group on agent orange. I must say that, in my opinion, sir, that functions very well.

Mr. PENNY. Thank you.

Mr. MONTGOMERY. Thank you.

We are going by the way the members came in this morning. Dr. Rowland?

Dr. ROWLAND. Thank you very much, Mr. Chairman.

There are two areas of dioxin being studied now, the carcinogenicity of it and in reference to birth defects. Are there, to your knowledge, any other areas that are being taken under consideration for investigation?

Dr. HOUK. Yes. In the epidemiology study, we will be looking for a whole host of different health outcomes. Primarily, these are predicted, Dr. Rowland, by animal data. We don't have good human data. We have a great deal of the animal toxicological data, both acute and some chronic—not as much chronic as we would like. Certainly the ranch hand study is looking at other things. The VA proportionate mortality studies and all of the studies of which I am aware are not designed exclusively to look at the cancer issue.

The birth defects study is designed to look exclusively at that issue because it is that study. But we are concerned about the other animal data linking dioxin to certain diseases. In the overall studies, I think all of the agencies are concerned about that. The design of the studies is to overall give us the answer.

Dr. ROWLAND. Do you have enough information at this time in any of these other areas to suggest a relationship?

Dr. HOUK. Other than chloracne, no.

Dr. ROWLAND. Thank you, Mr. Chairman.

Mr. MONTGOMERY. Thank you, Doctor.

Mr. Burton of Indiana.

Mr. BURTON. Thank you, Mr. Chairman.

Dr. Houk, in Indiana, we just celebrated Vietnam Veterans Day on May 1. We had a ceremony down on War Memorial Plaza. A number of the veterans came up and talked to me and asked me about the progress of agent orange research and wanted to know what was being done to make sure that they were going to get help and their families were going to get help.

You indicated in your testimony that a number of these studies—at least some of them—won't be completed until 1987. Isn't there any way that those could be speeded up so that we could come to some conclusions before that? Some of these people feel like—and I tend to agree with them—that they need a response quicker than that. That war has been over for a long time, and they believe that the side effects are continuing to hurt their families and their children, and they would like to know what the Government is going to do for them.

Dr. HOUK. It is not possible to conduct the epidemiologic study any faster than having it to come out in 1987. If you doubled the

amount of money or tripled the amount of money going in, you still would not get the job done very much faster. It is a limit of getting people in and tracking people down. One of the issues is going to be, and we are going to have the help of veterans groups in this, the groups who are selected for the study, to really encourage them to participate. If we can't find people, they can't participate in the study, and the results are not there.

I think this is the reason that a lot of the other studies have been coming—the proportionate mortality study, the VA, the birth defects, the ranch hand—are going to be coming in on different timetables and will provide some information. We don't have to wait, I don't believe, until 1987 before there will be information upon which the Veterans' Administration and the Congress can act.

Mr. BURTON. Is there anything that we can do in the Congress to speed up the informational-gathering process so that you will be able to complete those any quicker?

Dr. HOUK. One of the difficulties, because of the privacy of the individuals concerned, is tracking down people, particularly tracking down females who change their name in marriage. The identification of those individuals through social security numbers or through the Internal Revenue Service and the tax, that is a very difficult and complex issue which has been partially addressed by a piece of legislation specifically for the National Institute of Occupational Safety and Health. We will be happy to provide that to the committee for your record.

But it is being able to find people, and yet being sensitive enough of their privacy and their concerns so that we don't violate their privacy in finding them scattered throughout the country.

Mr. BURTON. Thank you.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Thank you, Mr. Burton.

I only have two questions, and then we will call on the Honorable Tom Downey, a Member of Congress, to give him the opportunity to testify before this committee.

My first question, Dr. Houk, is is Ranch Hand study a fairly well prepared study? Is the protocol for the study well conceived?

Dr. HOUK. In my opinion, Mr. Chairman, it is as elegant as you can get. The only criticism of the Ranch Hand study is that they were studying 1,200 individuals. The reason the 1,200 individuals are being studies is because there aren't any more. That is all of them. We have heard that in criticism sometimes that it is not big enough. If you don't have the people to study, you can't study more people. In a simple answer to your question, Mr. Chairman, yes, it is very well done, very well executed, very well oversighted and very well planned, and the results will be believable when they come out.

Mr. MONTGOMERY. Thank you.

I have one other question to Dr. Halperin. I come from an agricultural area, and I think Mr. Kull mentioned about the different types of herbicides such as 2,4,5–T. Tell us briefly something about that such as what it affects, and so forth.

Dr. HALPERIN. The principal effects of agent orange is from the contamination of 2,4,5–T, one of the two components. This is a spe-

cific contamination of a specific class of compounds. They use not only 2,4,5–T, but biphenyl chlorophenol, a wood preservative, and other kinds of chemicals. The hexachlorophene manufacturer is associated with contaminants of dioxin and a few other chemicals.

The real issue here, Mr. Chairman, is what are the soil levels of dioxin in the United States? No one knows that. One would suspect that in a rural community, particularly in the South where both you and I live, with the use of a lot of materials in weed control along the rivers, et cetera, that we would have higher soil levels than a community that is not associated with their use.

There is also a general misunderstanding, I believe, Mr. Chairman, in the use of the term "dioxins." When we talk about dioxins, we should limit our concern in this issue to 2,3,7,8-tetrachlorophenol, a specific compound, one of the 75 families of dioxins. You frequently hear that dioxins are made by grilling steaks, by the combustion of automobile and diesel engines, from the incineration of our incineration plants, et cetera, et cetera. That is true, but it is not that specific compound of which we are interested in this issue of agent orange.

Mr. MONTGOMERY. I guess my question is can you relate agent orange to pesticides or herbicides, the dioxins that are used on agricultural crops?

Dr. HALPERIN. A herbicide, 2,4,5–T, one of the two components of agent orange has been used in this country. I believe it was discontinued in 1979. I may be wrong on that date, but at a certain time.

The dioxin got there because it is a contaminant of the manufacturing process. If that manufacturing process is very carefully controlled as in relation to temperature and pressures, and if the clean-up of that produce is very carefully done, it can be marketed with very low levels of dioxin in that particular batch of 2,4,5–T that was made.

If, on the other hand, the manufacturing process is sloppy and is not well controlled, you get much higher levels of dioxin as a contaminant for that.

It is related to some of the agricultural uses of these compounds, and that means that those compounds must be as scrupulously clean as we can make them.

Mr. MONTGOMERY. Thank you very much. You have been very helpful this morning.

I would like to thank the panel for being here and taking your time to appear before us.

The next witness is a distinguished Member of Congress, the Honorable Thomas J. Downey, of the 2d Congressional District of New York. I would like to welcome Congressman Downey, who is a member of the Ways and Means Committee, and also is unofficially the best athlete in the Congress of the United States.

Tom, welcome to this committee. We would like to have your testimony.

STATEMENT OF HON. THOMAS J. DOWNEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. DOWNEY. Thank you, Sonny.

In October, Mr. Chairman, Senator Heinz and I released this report on the VA agent orange examination program and actions needed to more effectively address veterans' health concerns. I became involved in this subject the same way lots of us get involved with these issues on Long Island. We have a series of younger veterans who feel that they have been, in one way or another, afflicted by agent orange. They have set up a New York State group and they are very active in their lawsuit against the government.

This one particular fellow—I want to relate this before reading my testimony—was found to have testicular cancer. The incidence of that in a young man—I think he was age 30 or 31 at the time—is very, very rare, 1 in 10,000. He was very concerned that he was just one of many in his unit who, they had since found out, were in an area that had been sprayed and had been affected.

He tried to contact the 15 members of his unit and he was only able to contact 6 of them. Of the six, five had severe health problems that were abnormal in their incidence in society. Two of them had chloracne. Others of them had reduced resistance to alcohol, which they claim is one of the side effects of exposure.

It is the result of that activity in my Congressional District that I became involved. I think that we see from this report, which is what I am about to talk about, a very, very sad response to this problem by the Veterans' Administration.

Mr. Chairman, I want to thank you for having this hearing and allowing me the opportunity to come before this committee regarding the agent orange issue. My colleagues and I, we all have, been besieged with questions and letters over the last few years from Vietnam veterans who are concerned about exposure to agent orange. A question asked by many is, "What is the Veterans' Administration doing to help me?" This question, unfortunately, becomes an embarrassing one to answer for many of us. The Vietnam veteran has tried turning to his Government for answers and help, and he has been sorely disappointed.

The following is a section of a letter from a Vietnam veteran who suffers from a serious illness that he believes is due to his exposure to agent orange. He describes how dissatisfied he was by the attitude of the doctor and the agent orange examination program itself.

> To me it was rather farcical to take laboratory work done months earlier which had, in no way, anything to do with agent orange * * *. So, once again, the people in the institution of the Veterans' Administration gave me a slap in the face for my service in Vietnam * * *. I found this program conducted by the VA amidst great ballyhoo and publicity to be an ineffectual and as insulting as was their so-called "Jobs-for-Vets" program of a few years ago. In an effort supposedly designed to reconcile the Vietnam vet with the rest of American society, the major instrument for that reconciliation is doing more to widen the rift than to heal the wound * * *. The prognosis for me is 55 percent chance of living 5 years if I take chemotherapy and experimental drugs * * *. Could all of this been caused by agent orange? Apparently, we'll never know because the VA doesn't want to find out * * *. Bitter? Angry? Hurt? You bet I am. I don't want their damn money, I just want a little help now that I am totally disabled and for my wife and my children to have the satisfaction of knowing what really, in the final analysis, killed me. If not agent orange, fine, but let's not support any more farces under the aegis of the VA such as the "agent orange" Screening.

I think this is a particularly sad commentary, Mr. Chairman and members. This particular veteran has expressed the sentiment of many Vietnam veterans who are disgruntled, disappointed. and disgusted with the inertia exhibited by the Veterans' Administration. The Vietnam veterans have pressing questions about chemicals with catch code names—questions about chemicals that can defoliate a jungle, but supposedly not harm young men—questions about the lack of real concern by an agency that should be offering help.

Obviously, the VA has chosen not to pay attention to the complaints of Congress regarding their program. I realize that the subject of the hearing today is the status of federally conducted agent orange studies. However, my testimony will focus on the General Accounting Office report which I released in October 1982. I was both pleased and saddened to release the report. I was pleased that we in Congress have taken steps to try to solve the problems facing the Vietnam veteran and have confirmed veterans' charges against the VA. I was saddened that the VA, the Government agency which is supposed to abide by its motto, "To care for him who shall have borne the battle," cares very little.

I requested the GAO study over 2½ years ago. Here, again, Mr. Chairman, we have a veterans hospital up in Northport. I went up there, and then I went over to one of the VA hospitals in Iowa. I was, frankly, appalled by what I saw. Like most of us, we learn in this business that where there is smoke, there is fire. So I asked the GAO to take a look at some of the hospitals. It covered 14 hospitals nationwide. According to the study, only 1 of the 14 medical centers adequately followed up on the health problems reported by veterans. The study clearly indicates that the VA has made little effort to insure that the program is addressing veterans' health concerns.

I might add, Mr. Chairman, the Minneapolis center was an outstanding exception to the problems cited in the study.

The study confirmed veterans' complaints that medical examinations were incomplete. Eight hundred and ninety-one veterans responded to the GAO questionnaire, and 55 percent were dissatisfied with their agent orange examination. Those veterans said the following:

Forty-nine percent were dissatisfied with the interest VA personnel took in their health; 47 percent were dissatisfied with the thoroughness of the questions VA personnel asked them; 49 percent were dissatisfied with the opportunity that they were given to ask questions; 57 percent were dissatisfied with the completeness of their agent orange examination; 80 percent were dissatisfied with the amount of information the VA provided them about agent orange; 83 percent were dissatisfied with the amount of information they learned from the VA about their own exposure to agent orange; and 57 percent were dissatisfied with the amount of time the VA spent on their examinations.

Another major finding was that the examinations were performed by physicians not always knowledgeable about the potential health effects of agent orange. The GAO report states, and I am quoting, "* * * about half of the environmental physicians expressed negative attitudes about the agent orange program * * *

environmental physicians at six of the facilities told us that the program was of little or no use * * *."

The study further confirmed that little or no attempt was made to provide veterans with information about agent orange. Although about 500,000 agent orange information pamphlets were distributed to VA facilities, less than 9,000 were sent outside the VA system. A $29,000 video tape on the agent orange examination program was mentioned by only 2 of the 112 VA facilities contacted in the GAO telephone survey. Only 4 of the 10 facilities provided the pamphlets to veterans who had contacted the facility, and only 24 of the 112 VA medical facilities GAO contacted by telephone survey told GAO about the pamphlet. So we have got the tools, but apparently the VA doesn't appear to want to tell anyone about them.

The sad irony is that the Vietnam veteran has literally been searching for answers while the VA practically hides its outreach materials. The GAO found that various States had established dioxin commissions and outreach programs which have proved very effective. Unfortunately, the VA just doesn't follow suit. The VA doesn't reach out to those very veterans it was established to help.

Finally, the VA's $3 million computer registry containing the names of 89,000 Vietnam veterans examined for symptoms of agent orange exposure is of little or no use. Our colleague, Mr. Burton, was asked about finding out who they were. Just listen to what the VA is currently doing with this registry.

It is not meeting two of its primary objectives—providing information on health problems experienced by Vietnam veterans, and facilitating followup with veterans if necessary. Why is it not meeting its own objectives? The study found that the registry does not contain the specific diagnoses of health problems and lacks adequate exposure and medical history information to compare veterans' health problems with their degree of exposure to agent orange or the area of Vietnam where they served. As far as its usefulness for followup, the VA did not include veterans' addresses in the registry, and the GAO found that at half of the facilities visited, the locator cards did not contain adequate information for followup with veterans.

In a letter dated November 10, 1982, I requested that the Administrator of the Veterans' Administration discontinue the agent orange registry. The Administrator responded by claiming that the registry had "* * * proved to be a useful mechanism * * *" and that "Full information can be retrieved from the medical center's files and the computer registry provides an index to the additional data there." I find this highly questionable since the GAO found that only 8 of the 14 medical facilities visited maintained adequate information in the locator card system to permit followup contact with veterans, and none of the facilities routinely updated the locator files. Generally, the cards were missing the veterans' city, State, and ZIP code. The VA still has not demonstrated how this registry will prove useful. It is serving no purpose, and approximately $892,000 is spent annually on this particular item. This money could be used in other areas of the program. I am once again stating that the registry should not be continued.

There is no question that the integrity of the Veterans' Administration is at stake. How many times must the VA be reprimanded?

How often does the VA need to be reminded of its function and responsibilities? How often must Congress ride on its tail? I believe that, at this point, it is up to the Congress to see that the VA is forced to improve its agent orange examination program. The committee can be instrumental in providing oversight to see that the recommendations of the General Accounting Office are fully implemented by the Veterans' Administration. The GAO report is a fine piece of work and can greatly benefit the Vietnam veterans. The VA continually promises that it will provide adequate care for these Vietnam veterans, and yet the results just don't materialize.

There is no question that additional hearings are necessary so that the VA is forced to answer to this committee for its lackadaisical attitude. If the recommendations of the report were implemented, the agent orange examination program could benefit a great number of Vietnam veterans and perhaps restore some faith in the program. We cannot expect the Vietnam veteran to believe that the Veterans' Administration is adequately assisting him if we don't believe it ourselves.

In conclusion, I offer the following points. First, the agent orange registry is a mockery and should be discontinued. Second, there is a tremendous need for improved outreach and coordination of outreach materials. These materials should be reaching these veterans. Finally, I believe that oversight by this committee will insure this, and also whether or not the examination program has been improved to meet the health care needs of the Vietnam veterans exposed to agent orange. Once again, I refer to the letter by the Vietnam veteran from Virginia who is right when he says that the way this program is being run widens the rift rather than heals the wound. The VA's inaction and unresponsiveness just adds salt to the wound. I think that the time for hearings, members of the committee, is long overdue.

Mr. Chairman, what I would recommend to you also is that you show up or appear, members of the committee, at one of the agent orange screening centers and ask where it is. If you find what I found, you will find that there is no designated portion of hospitals, that there are no designated environmental doctors to do this work, they just pick out regular physicians with regular training who are so designated. Only one hospital of the system that we could find—and that one was in Minneapolis—actually received additional funding to look at this program in any detail. These men and women, as you know, particularly men who have served in Vietnam and have any concern about this—and I dare say, as the committee knows, there are literally tens of thousands—are appalled by this. They see it as another way of our not caring about them. The irony is I know the members of this committee care and I know that the Members of the Congress care. The question is bridging the gap between us and them. That bridge, the VA, I am afraid, is in desperate need of repair.

Thank you again, Mr. Chairman, for this opportunity to testify and present the findings of the general accounting office.

[The statement of Congressman Downey appears on p. 127.]

Mr. MONTGOMERY. Thank you, Mr. Downey, for that very strong testimony. I might say that I and other members of the committee and the staff are familiar with the GAO report in some areas that

you have explained, especially on the registering. You are correct. There was a problem there. Dr. Custis will appear in few minutes and we will ask him the same questions that you have asked us this morning.

This is what we want to do. We want to do the right thing on agent orange. It has started out slowly, and we are trying to get it on track. That is basically why we are having these hearings.

We had hearings by Mr. Applegate on the Compensation Subcommittee last week, and now we are having these hearings, mainly about the different studies that are talking place. We are always open for suggestions. I know that you have a deep interest in the Vietnam era veterans as well as other veterans. You represent a lot of them. We are open for constructive criticism. That is what you have given us this morning.

What is the top area that you are concerned about, this top point that you might want to mention here this morning.

Mr. DOWNEY. Sonny, let me just say that in the work of this committee in its oversight, it is important to make sure that the hospitals are conducting the exams and making an extended effort to provide these individuals with this additional information and by making sure the exams are properly done, I think that if the committee did nothing else but to conduct some oversight, you will find that the VA will respond to you. You know that to be the case. As soon as the committee turns up the heat, they will dance properly. That is something you just have to do.

They know what has to be done and they know how it has to be done. The question of whether they do it or not is another thing. You have been here long enough—longer than any of us—to know that when a Government agency comes up and says, "Well, yes, we have been bad," they do their dance and then they leave, and they can go back and continue to do anything they want. They are like a big pillow. They can absorb your punch and move right back after a little bit of time and you move on to other things—inevitably because there are so many other things to do.

Keep the pressure on them. Do some spot checks in these hospitals and find out what they are doing. You can make them change. They really do need to change.

Mr. MONTGOMERY. As you know, Mr. Edgar of Pennsylvania is chairman of the Subcommittee on Hospitals, and they have been very active so far this year. We will certainly pass your idea on to that subcommittee in order for them to take a look at it.

Mr. Hillis?

Mr. HILLIS. I will yield to Mr. Burton.

Mr. BURTON. Thank you, Mr. Hillis. Thank you, Mr. Chairman.

One of the things that really mystifies me is this outreach program you were alluding to, and you have evidently done some study on this. You said there were 500,000 agent orange information pamphlets that were distributed to VA facilities, but less than 9,000 were sent outside the system. Do you mean through the mail?

Mr. DOWNEY. In any way—offered off counters, handed to people.

Mr. HILLIS. I can't understand with service numbers and social security numbers that are filed in computers now at the Internal Revenue Service why in the world we can't contact them directly by blanket mail with some kind of a letter to every single Vietnam

veteran and say that this information is available if you desire to have it. It is unbelievable to me that, with the informational sources we have available, that we can't contact these people directly.

Mr. DOWNEY. I would say to my colleague that that would be long overdue. Let me explain to you that a lot of the information that veterans are going to ask for—the VA may say, "Look, we don't want to needlessly alarm anyone." They are already alarmed. You may have heard all of the horror stories about cancer, about genetic defects. It is not as though you are going to needlessly exacerbate a problem that doesn't exist. It does exists. What needs to be done is to provide people with information.

On Long Island, we have set up privately—because we couldn't do this at Stony Brook—a genetic screening program which is very involved and tremendously costly to the State, because we have been deluged with women of childbearing age who are married to vets and are very concerned about genetic screening. With the vast majority, that doesn't need to be done. But information explaining that can make a very big difference to whether or not people understand the scope of their problem. They are not even getting the information. They don't even know about the film. I mean only four of the contacts were even aware that there is a good film that explains some of the problems.

Mr. BURTON. Mr. Chairman, would it be possible to have an inquiry directed to the VA to find out why some kind of correspondence can't be mailed or communicated to these veterans?

Mr. MONTGOMERY. That is an excellent point. Dr. Custis is the next witness. I believe that would be the time to find out. If we don't get a satisfactory answer from Dr. Custis or from the VA, then we will consider what you suggested.

Mr. BURTON. Thank you, Mr. Chairman.

Mr. DOWNEY. I would just tell my colleague once again that these are not my fanciful view of history or of what happened, this is the GAO report saying that when they made contact with the various 112 VA facilities, only 2 of them in the telephone survey knew anything about the film.

Mr. MONTGOMERY. Mr. Sundquist.

Mr. SUNDQUIST. Thank you, Mr. Chairman.

I appreciate your testimony, Mr. Downey. I spent some time Friday in a vet center in Memphis, and I did note that there were brochures and pieces of information there about agent orange. In fact, there were things on the walls. So I feel that maybe there is some progress being made in this regard.

Mr. DOWNEY. I hope so.

Mr. SUNDQUIST. In your testimony, you say that the agent orange registry should be discontinued.

Mr. DOWNEY. Yes.

Mr. SUNDQUIST. Isn't that a little incongruous when you are also saying that we ought to be contacting these people?

Mr. DOWNEY. The registry was set up so that it could presumably get information and keep a list of people. We are not getting any of the scientific data from the registry, and they are not keeping the names and addresses. So it would be one thing if the registry were filled with names so that you could mail things, but the vast major-

ity of the registry doesn't contain that information. So it would be nice to have a complete registry with outreach, but unless you want to spend a lot of money, which the GAO doesn't recommend, to fix it, my recommendation is that you discontinue it and find some other means of contacting the veterans. You are spending about a million dollars a year to maintain it and we spent $3 million to set it up.

Mr. SUNDQUIST. What would be an alternative?

Mr. DOWNEY. I don't know offhand. It would seem to me that there must be a list, though it is incomplete and inadequate—the GAO has done a study of that as well—of the veterans who served in the areas that potentially were defoliated. I suggest that you do a mailing to them.

Mr. SUNDQUIST. I just wondered if we shouldn't perhaps correct the registry so we would have a mailing list as opposed to discontinuing it.

Mr. DOWNEY. Let me read to you from the report, one paragraph on the registry. "Although the registry's deficiencies could be corrected, the corrections would be costly and the data still could not be used as a basis for scientifically valid conclusions about veterans' health." So the question is whether we use the registry as some basis for information for the Centers for Disease Control. It clearly can't be used for that. There are a whole host, although I can't think of them now, of ways to get hold of veterans to mail them a pamphlet other than the registry. The registry already presumes that you have taken the first step to come to the hospital.

Mr. SUNDQUIST. I see. Thank you, Mr. Downey.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Mr. Penny.

Mr. PENNY. Mr. Chairman, I just have one quick question of Congressman Downey.

You indicated in your testimony that you requested the GAO study 2½ years ago. Can you give me the timeframe during which the study was conducted?

Mr. DOWNEY. The report was released, Tim, on the 25th of October of last year, so it would have been in 1980, or actually late 1979, that they went about it. As is usually the case with the GAO, they were very thorough. Despite the fact that Senator Heinz and I were constantly berating them that we wanted this information done more quickly, they felt that in order to get the questionnaire produced and sent out it would take that long. So it was during the period of 1979 and 1980.

Mr. PENNY. Thank you, Mr. Downey.

Mr. MONTGOMERY. Mr. Evans?

Mr. EVANS. Mr. Downey, I came in late. I don't know if it is in your written testimony, but I heard you say there was not any kind of screening program in one of the hospitals that you went to. Was that in your district?

Mr. DOWNEY. The one outside of my district in Iowa, was all right, when I showed up and asked them to show me the Vietnam veteran screening program. First of all, the way I look, it took me some time to convince them that I was a Member of Congress. Fortunately, I had my voting card with me.

Mr. MONTGOMERY. That has been your problem up here, too, with your young looks.

Mr. DOWNEY. I still get pushed out of the elevator, I might add.

Anyway, after I established who I was and why I was there, we set about to talk to a number of physicians who were just regular doctors, one of whom took me aside and said that the program was a joke.

Mr. EVANS. What city in Iowa—Iowa City?

Mr. DOWNEY. No, it was the other one. I forget where it was. I remember being there, but I, being from the East, after leaving the elite New Jersey, it all becomes a big blur to me. It was not the one in Iowa City; it was the other one.

Mr. EVANS. I think you raised a good point. We are embarked on a nationwide, region-by-region survey of the hospitals on the Hospitals and Health Care Subcommittee. It seems to me that if we are going to publicize this, if we are going to put out pamphlets and send them out to Vietnam veterans, we had better have the program there. If one veteran was outraged that there wasn't an agent orange screening program, and you proceed to go whole hog and advertise it, you are going to have a lot of people showing up for it. If the program doesn't exist when they come to the hospital, they are really going to be outraged.

Mr. DOWNEY. Sometimes, let me say, it is better to get the pamphlets out just for the purpose of disseminating information and then force the VA to respond to them as they come in. I think that that is a potentially backwards way of doing it, but it seems to me from time to time the only effective way of moving them.

Mr. EVANS. From now on, I hope to make every one of the field trips. We have already been to Pittsburgh, and the chairman has had most of the committee down to Mississippi to visit the hospitals there. That is one point that I will raise continually when I go through the facilities.

Mr. DOWNEY. I think that you and Mr. Penny, if you showed up at a hospital and started asking some questions, or any member of the committee—just by yourself without one of the pre-announced visits where everybody is showered, shaved, in their nicest clothing, and just freshly painted sign "Herbicide Clinic, Welcome"—you will find that there is very little to see.

Mr. EVANS. I thank the gentleman for his testimony today.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Thank you, Lane.

I agree with what Tom Downey said, and I wish that the members of this subcommittee—and it is an investigative subcommittee—would just show up like that sometime.

On these outreach programs, Tom, there has been some feeling that we kind of let them operate on their own. I found out that it is really the individual who heads it up who makes the difference. I went out as you did to Los Angeles. They said they wanted me to go to this outreach program, and I said "Let's go to this one." We went out there, and there was a black person there who was totally in charge. The place was neat. He didn't have a television set where he could sit around all day. He was really running an outreach center like it was designed.

We have a problem—and the staff can correct me—whether the director of that hospital has the authority to go out and make some suggestions to the director of the outreach program. Quite frankly, it is really left up to that person who is in charge.

Mr. DOWNEY. Sonny, that is absolutely right. As you no doubt found, and it is true of any Government program, if you get good people involved in this, they can do a marvelous job of reaching out to the community and making sure that they are aware of what is available and what questions they should be asking.

If you made the hospital administrators or facility administrators aware that you thought it was important, they would put good people in those programs, or they would put better people in them, or they would watch them. Right now, it is a hit or miss operation, as you suggest. Some people are good, and some people aren't. Frankly, we just can't bear to have a lot of bad people operating that outreach center. It is just hurting all of the wrong folks.

Mr. MONTGOMERY. This has certainly been helpful testimony this morning. We will follow up on what you have told us.

Thank you very much.

Mr. DOWNEY. I would observe, Mr. Chairman, that right here you have the makings of a good two-on-two game, right here in the subcommittee. I congratulate you on selecting this fine array of basketball talent.

Thank you.

Mr. MONTGOMERY. Thank you.

Mr. BURTON. Excuse me, Mr. Chairman.

Did you say that with a condescending tone in your voice?

Mr. DOWNEY. I will pass on that.

Mr. MONTGOMERY. We have two sets of witnesses still left. We will have the Air Force testify right after we hear from Dr. Custis.

Dr. Custis, we are always glad to have you. Come on up and let us beat on you some. I noticed, Dr. Custis, you were getting further back in the hearing room. You are always welcome to come to the front.

STATEMENT OF DR. DONALD L. CUSTIS, CHIEF MEDICAL DIRECTOR, VETERANS' ADMINISTRATION, ACCOMPANIED BY DR. BARCLAY M. SHEPARD, ACTING DIRECTOR, AGENT ORANGE PROJECTS OFFICE, VETERANS' ADMINISTRATION; DR. ALVIN YOUNG, ENVIRONMENTAL SCIENCES SPECIALIST, AGENT ORANGE PROJECTS OFFICE, VETERANS' ADMINISTRATION; AND AUDLEY HENDRICKS, ASSISTANT GENERAL COUNCIL

Dr. CUSTIS. Mr. Chairman, as always, it is a pleasure to appear before your committee.

With your permission, I will present a summarized version of the opening statement. It should take about 4 minutes.

With me at the table are Dr. Al Young of the Agent Orange Projects Office; Dr. Barclay Shepard who heads that office; and Audley Hendricks of the Office of General Counsel.

Mr. Chairman, the Veterans' Administration has undertaken a number of activities which I think demonstrate our commitment and resolve to address the concerns raised by our Vietnam veterans. When the controversy first arose in late 1978, we initiated a

program of offering a free examination to any veteran who was concerned about the possible health effects of exposure to agent orange. A veteran coming to the VA under this program receives a thorough physical exam with all appropriate laboratory tests. The results of the examination are discussed with the veteran personally and basic information concerning the health status of the veteran is entered into the computerized agent orange registry.

I might say here, Mr. Chairman, that the GAO survey of this program, specifically the questionnaire that was sent to veterans, was put in the hands of veterans, all of whom had physical exams prior to 1981. We have come a long way since then in improving not only the completeness of the program or the examination, but also the attitude of those providing services.

The main purpose of the registry is to provide a systematic way to identify concerned Vietnam veterans and to assist in determining whether there are any significant health trends among them.

Again, Mr. Chairman, on the contrary, it was never our intention to design a registry to be used as a scientific tool. It cannot be used as a scientific tool. A registry of this nature is inherently flawed as the basis of an epidemiological study. It does not provide valid data for scientific analysis. We will have more to say about the registry in a minute.

To date, over 106,000 veterans have received examinations under the program. With the enactment of Public Law 97-72, the Veterans' Administration was authorized to provide comprehensive health care to veterans for conditions that may be associated with exposure to dioxins contained in herbicides in Vietnam. Under this entitlement, approximately 12,000 veterans were admitted for care during the period February 1982 to February 1983. There were approximately 440,000 outpatient visits to VA health care facilities.

While we are attempting to meet the immediate health care needs of Vietnam veterans, we continue to explore every approach available that will assist us in providing up-to-date technical information for our health care staff. The series of scientific monographs written by recognized experts in their respective fields are being prepared on the topics of agent blue, birth defects, genetic screening and counseling, human exposure to phenoxy herbicides and chloracne. When completed, these monographs will be widely distributed, both within and outside of the Veterans' Administration.

Accompanying this effort will be an interim update of the review of the literature on herbicides that was completed in 1981. The Veterans' Administration has been mandated to perform an epidemiologic study of veterans who were exposed to dioxins contained in herbicides used in Vietnam. The Veterans' Administration contracted with UCLA to develop the study's protocol and asked non-VA experts to review it.

When concerns were raised about the pace and credibility of a VA-conducted study, and upon your wise recommendation, Mr. Chairman, the Veterans' Administration asked the Centers for Disease Control to undertake the design and conduct the study. The Centers for Disease Control will have complete independence in this effort, which is expected to take a number of years to complete. Parenthetically, the only role the VA retains in this regard

23-542 O - 83 - 3

is to act as a conduit for funding through the VA funding sources. Justification for resource requests is left to the CDC.

Complementing the epidemiologic study are a number of other Veterans' Administration-initiated studies that should yield results in a shorter timeframe. These are a mortality study that will compare mortality patterns and specific causes of death between those who served in Vietnam and those who did not. There will be a twins study that will examine pairs of identical twins, one of whom served in Vietnam, the other of whom did not, to determine whether the current psychological and physical health of Vietnam veterans was adversely affected. There is a birth defects study which is being jointly sponsored by the Department of Defense, the Department of Health and Human Services, and the VA to determine whether Vietnam veterans are at higher risk of parenting children with birth defects than non-Vietnam veteran. And there will be an epidemiologic study managed by the Armed Forces Institute of Pathology exploring the possible causal relationship of phenoxy acid herbicides exposure and soft tissue sarcomas. Finally, a retrospective study of dioxins and furons in adipose tissue in cooperation with EPA to determine the background levels of dioxin in fatty tissue among males of the Vietnam era veteran age group and whether service in Vietnam has had an effect on the dioxin levels.

Mr. Chairman, we recognize also the need to fully inform our VA staff in the field of these initiatives and to keep them advised of the many research efforts now underway. Also, we must assure the Vietnam veteran that we are doing all we can to address the very sincere concerns they raise about exposure to agent orange. Toward that end we will continue to visit VA facilities throughout the country offering a program of education and information to VA staff, veterans service organizations, and other concerned citizens. We will attempt to be fully responsive to questions raised and to insure that problems that may be experienced by veterans and their relationship with the VA are promptly investigated and corrected wherever possible.

On the other hand, Mr. Chairman, I really don't know what to do about the irresponsible critic who seems to feel that he has a monopoly on compassion and shows no hesitancy in taking isolated half-truths and inflating them into libelous attacks against the entire VA health care system. I can't believe he does not realize the damage he can do in undermining the veteran patient's confidence in the health care system which they so sorely need. It is a good system, and I am proud of the talented, dedicated and good people who serve in that system.

Mr. Chairman, that concludes my summary remarks. My colleagues and I will be pleased to answer any questions the committee may have.

[The statement of Dr. Custis appears on p. 129.]

Mr. MONTGOMERY. Thank you, Dr. Custis.

I know your concern. Mr. Hillis and I were talking about this situation. There is a tendency to work on Government agencies from time to time in a harsh manner. But you do have a lot of friends in the Congress, and we do appreciate the dedication that we get out of your Department. You have more friends than you think. You

continue to do the job that you are doing and it will all work out. We appreciate you being here this morning.

I only have one question. I understand that on the 1984 budget, there is an amendment that would be of interest to you. Do you care to tell us what the specific provisions of this amendment are?

Dr. CUSTIS. You are referring to the supplemental appropriation for the CDC study?

Mr. MONTGOMERY. To support agent orange research efforts.

Dr. CUSTIS. It is in the research budget. It is the 1984 requirement for supporting CDC's epidemiologic effort, and I think it is $55 million.

Dr. SHEPARD. We are in the final stages of preparing the budget amendment, which will include the request for funds to support the CDC epidemiological study.

The dollar figure which they have requested is in the range of $56 million in fiscal year 1984. The additional moneys alluded to by Dr. Houk would be over the subsequent years.

Mr. MONTGOMERY. So it would be a total on that study of about $70 million?

Dr. SHEPARD. Yes, sir, that is what they are projecting at the present time.

Mr. MONTGOMERY. Why is that so expensive, Dr. Shepard?

Dr. SHEPARD. When you consider that they are proposing conducting questionnaires with some 30,000 veterans, that is a large number of individuals. It isn't just conducting the questionnaires, it is the significant expense involved in contacting these individuals, and a number of them will be brought to one or two or three examining centers around the country and a very thorough examination will be conducted on some of the individuals in each of these cohorts.

I think that if you compare it to the Air Force Ranch Hand study costs—and I will defer to Dr. Chesney and his colleagues—you might want to ask him how much it has cost the Air Force to conduct the ranch hand study. I think the figures are compatible.

Mr. MONTGOMERY. All right.

As I understand the study we are talking about, there will be a group that was exposed in effect a number of times to agent orange, and then there were groups in veteran that were not exposed, and then groups that did not even go overseas. Is that correct? I am really trying to get that clear in my mind.

Dr. SHEPARD. Yes, sir.

Basically, the CDC is proposing two parallel studies, one consisting of three cohorts which will look at the whole issue of the health outcomes resulting from exposure to agent orange, and then two cohorts to examine the broader issue of the health effects of service in Vietnam fairly irrespective of agent orange, the other environmental circumstances which Vietnam veterans faced. That second study will be of two cohorts, one of whom served in Vietnam, and the other—matched by age, sex, race, and so forth—who did not serve in Vietnam.

Mr. MONTGOMERY. Thank you.

Mr. Hillis.

Mr. HILLIS. Thank you, Mr. Chairman.

I, Doctor, want to also express my support of what you have been doing.

I am reminded of when I used to practice law the defendant who, when he first got on the stand, was "When did you quit beating your wife." I suspect that is how you felt here this morning in listening to some of the preceding testimony as to the characterization of the efforts of the VA in the approaches that they have taken to try to deal with this difficult problem.

I don't want to pick on any other Government agency as well, but I have seen GAO reports on many things of which I thought were either flawed or hastily done, or certainly not responsive to the questions that were asked. I would want to study this one very carefully before I gave it credence of jumping out of the boat and taking a different direction.

I don't want to put you on the spot, but I wonder if you would want to comment on that report and, specifically, update us as to any criticism that was directed at the program?

Dr. CUSTIS. Yes, Mr. Hillis. As a matter of fact, we have the counterpart of a white paper which, if we may, we would like to submit for the record as a detailed response to every recommendation GAO made.

Mr. HILLIS. I would like to ask you to do that.

Dr. CUSTIS. All right, sir.

[The information appears on p. 135.]

Dr. CUSTIS. Incidentally, Dr. Shepard just reminds me in a note he has written here that I said that the questionnaire from the GAO went to veterans examined before 1980. I should have said during 1980, prior to January 1981, to correct the record.

Mr. HILLIS. Let me ask another question. Is there any question in your mind as to the need for the agent orange registry?

Dr. CUSTIS. We feel the agent orange registry serves our purpose very well. We feel that it also serves the individual veteran as a baseline history and physical for future reference when other things may appear. Being computerized, it is a duplication of the essential facts over and above the medical record.

We also have used it on four occasions for mass mailings. We do have addresses for everyone registered in the file. We have no intention of discontinuing it. Incidentally, the price quoted of $800,000, I don't know where it comes from. It must be a blue-sky figure.

Mr. HILLIS. Is the cost worth the effort, in your opinion?

Dr. CUSTIS. It is worth more than the cost, Mr. Hillis. We feel very strongly about it and are very protective of the registry.

Mr. HILLIS. You mentioned, I think, also in your testimony that some 9,400 veterans have been admitted as inpatients to VA medical centers under Public Law 97-72, and there have been roughly 369,000 outpatient visits. Are you able to draw any preliminary conclusions from the episodes of treatment as to the disabilities being medically associated with agent orange, or is it even possible to do so at this stage?

Dr. CUSTIS. I was about to answer the question, but I think I will defer to the two experts on my right, and then add to what comments they might have.

Dr. SHEPARD. Those two figures that you read, the figure dealing with the 9,400 admissions and the 369,000 outpatient visits are those which were determined to have resulted from exposure to agent orange. Dr. Custis' testimony alludes to the total figure that has come through as a result of passage of Public Law 97-72 which, as you know, included exposure to ionizing radiation.

We are in the process now of looking at the patient treatment file, which is a computerized file of any veteran who is admitted to a VA hospital. Prior to this legislation, we had not had a systematic method for determining or inserting into the patient treatment file those veterans who actually served in Vietnam and those who did not. We have now instituted such a process, so that we are now collecting data which we will be able to analyze and, therefore, make a comparison between those veterans of the Vietnam era who actually served in Vietnam and those who did not.

Dr. CUSTIS. What I would add to that, Mr. Hillis, is that one should not expect nearly as much from that effort that Dr. Shepard was just describing. The real expectation lies in the epidemiologic study of CDC and other comparable studies such as Ranch Hand. Those are carefully designed protocols and much more scientifically based than a review of our patient treatment file.

Mr. HILLIS. Thank you, Mr. Chairman.

Mr. PENNY [presiding]. Mr. Sundquist.

Mr. SUNDQUIST. One question that I have is that on page 17 of your testimony—maybe I am not reading it correctly—it is regarding the Australian birth defect study. It says, "In all, 127 fathers of children with defects were Vietnam veterans, while 123 Vietnam veterans father normal, healthy children." It follows up and says, "There was no evidence that service in Vietnam increased the risk of fathering a child with a birth defect."

Dr. SHEPARD. The figures are correct, sir. I am not clear as to what your question is.

Mr. SUNDQUIST. It said that out of the study, 127 of the fathers of children—in other words, it applies that there were 127 fathers who fathered children with birth defects and 123 who fathered normal children. That is not the normal percentage of children who have birth defects.

Dr. SHEPARD. This is a case control study in which they conducted questionnaires on the parents of two groups, those with birth defects and those without, and the representation of Vietnam veterans in the two groups was statistically identical. There is no statistical difference between the 127 and the 123 when you are talking about a group of 8,000 children.

Mr. SUNDQUIST. It is confusing to me. Do you see what I am saying.

Dr. SHEPARD. Are you concerned about the difference between 127 and 123?

Mr. SUNDQUIST. Yes.

Dr. SHEPARD. That figure is not deemed to be statistically different. Those two figures, when measured against the total number of people questioned, there is the possibility of that being simply a chance difference. So when we talk about statistical difference when analyzed statistically, those two figures are essentially the same. So this study demonstrates that there is no increased risk of

Australian Vietnam veterans producing children with birth defects.

Mr. SUNDQUIST. I understand what the study says, but I think that sentence is very confusing. At least it is to me.

Dr. SHEPARD. We will take another look at it, sir, and see if we can't clarify it for the record.

Mr. SUNDQUIST. Dr. Custis, I appreciate your testimony. I do commend you for all of the good work that all of you do.

I am not trying to put you on the spot, but perhaps some of the criticism that the VA has been coming under is perhaps the slowness, at least in the perception of some veterans, that all of us arrived at, we moved so slow to recognize and really get involved in agent orange. Do you think that is part of the criticism, that it took so long for us to get to this point?

Dr. CUSTIS. I think that undoubtedly explains a lot of it, Mr. Congressman. I think there is enough blame to go around. I think the same thing is true in the private sector of medicine. I think that, through 1979 and 1980, there was a much higher level of doubt that there was any validity at all to this scare. As time went on and as some studies began to appear, there is more and more question and perhaps there is something behind this. To this day, I think that we simply don't know. We don't know one way or the other. The fact that we can't answer the veterans in a definitive way is very frustrating to them and further adds to their anxiety and, not being able to get the information they want, they undoubtedly are impatient with services rendered.

Mr. SUNDQUIST. I don't blame them for being impatient, and I don't think you do either, because we were so slow to act. Now, from their perception, as I get it from talking to veterans, they are saying that we are studying this thing to death. It took us so long to get to this point, and now we are going to study it to death.

When will we have—I am talking about a year—when will we have some definitive information of all of the studies that have been described, whether it is ranch hand or whether it is the one involving twins, the data from Australia, or all of the information that we have? When we will arrive at some conclusions? I think that will solve a lot of the problems. People may disagree with some of the conclusions, but when will we arrive at this? Do you have any sort of a target date?

Dr. CUSTIS. If I could start off with the answer, and then I will ask Al Young who obviously is anxious to say something.

I would say that the answer will come—one way or the other—will come sequentially over a period of time. The CDC is very close to reporting on their birth defects study. I understand that will be coming late this fall. The ranch hand study is now in the hands of their advisory committee for review and analysis. Those findings will be published yet this year.

Other studies will be come to fruition in 1984. Our twins study, hopefully, is slated for 1985. The large epidemiologic study, there is a general consensus that we cannot expect the end result of that before 1987. So it is going to be a sequence of information. As those studies are completed along, incidentally, with multiple other studies—in all, right now there is something like 25 or 26 studies just within Federal Government purview and subsidy. In addition to

that, there are miltiple studies in foreign countries that are going on.

The time will come when there will be a consensus arrived at in the medical scientific community that there is enough statistically significant evidence that stands up under the scrutiny of peer review and that can be duplicated by other independent investigators, there will arrive a consensus one way or the other.

Al, do you have anything to add?

Mr. SUNDQUIST. When will that be, Dr. Custis?

Dr. CUSTIS. I would say it will come slowly over a period of time, say, between 1985 and 1987. That is a pure guess, and others may disagree.

Mr. SUNDQUIST. The problem that the veterans have is you are talking about genetic studies, and they are going to be out of the child fathering age at the point you all come to some conclusion.

Dr. YOUNG. What I would like to add, sir, is that there are many issues, as you have eluded to. You have birth defects, cancers, and spontaneous abortions; all of these are concerns. Individual studies are answering each part and they are going to be completed at different times.

We already have from the Australians the first birth defects study; published in January 1983. Likewise, the New Zealand Scientist News folks just released a birth defects study in the same sort of timeframe. That is what is going to happen. You are going to see the birth defects studies coming out very quickly now. Then there are going to be the cancer studies, which are already coming out, and there will also be some additional cancer studies extending into next year.

So each part of these—the mortality study will look at death patterns. The State of New York has just completed their mortality study on veterans. We should have those results within the next few months.

There are going to be a lot of answers in 1983. Whether that will form a consensus remains to be seen. There will be more answers in 1984, a lot more in 1985.

Mr. SUNDQUIST. Will the VA, Dr. Young, assume the responsibility for taking all of this information, and say in 1983, when all of the genetic results are in of all the studies being made, that the VA will say conclusively, based on our studies and all of the other information the following: one, two, three, four?

Dr. YOUNG. One of the things that we are doing is, for example, having an outside scientific body assess the literature. We expect a report in January of 1984 of all of those scientific data that are available at that time. There will be an assessment by an outside body in addition to our own interpretations.

Mr. SUNDQUIST. I don't think you are getting the impact of what I am saying. We started late on studying this—I am not blaming anybody, we were all at fault—and now we are studying it, but I think there has to be some urgency on the part of everybody, not to rush anything through, but somebody has got to grab hold of the ball and say that this is the end of the ball game and we are now saying the following: one, two, three, four—so that it puts to ease those veterans who have some anxiety about these problems. Somebody is going to have to be responsible for taking all of the other

data and comparing it, and I think there is a sense of urgency that would solve a lot of the problems that we have and the veterans have.

Dr. CUSTIS. I think we can only assure you that we share your sense of urgency. Literally, everyone who has a vested interest in this problem would like to see it speeded up. The reality is that it is going to take time.

Mr. PENNY. Because the various studies will be completed over the course of the next several years, early studies are going to be used by veterans and others to try to draw some conclusions that the Veterans' Administration or the Centers for Disease Control may not want drawn. How you control that until such time as we are sure the evidence is conclusive, I think, is the concern that we feel needs to be addressed.

That is where the coordination comes in. How do we pull all of those studies together? How do we make sure that the right signals are going out to the public and the veteran population?

Dr. CUSTIS. I assure you that the VA will do everything we can to play a role in pulling things together and making some determination at the proper time.

However, it is not going to be just the VA, it is going to be the medical community at large with many authoritative offices engaged in the same thing. I am sure CDC will about the same time arrive at their opinion. I am sure that authoritative offices such as the Council on Scientific Affairs of the American Medical Association will be continuing to publish their status reports, their stand, as they have on two occasions now.

I don't see that one of our problems is going to be the unwillingness of somebody to coordinate and draw some conclusions when it is possible to do so. We certainly will play a role in that, I am sure.

Mr. PENNY. Mr. Sunquist, do you want to follow up on that?

Mr. SUNDQUIST. I have one last comment. That is that I submit, Dr. Custis, that if the VA would state publicly area by area with some time goals, that by 1984 we are going to have results on this, 1985 on this, 1986 on this, 1987 on that, then at least the veterans are going to know that this isn't going to be prolonged, for the sake of research discussion, for the next 25 years and that there are some targeted dates that we are aiming for and, even if they are preliminary conclusions, we will announce those preliminary conclusions; as opposed to, right now, study after study after study, maybe in 1984, maybe in 1985, maybe in 1990—I think that we need some targeted dates that we will have arrived at some conclusions in each area. That is my suggestion.

Dr. CUSTIS. We can do just that. As a matter of fact, in the next brochure that we publish for distribution, there is no reason why we can't respond to exactly the sort of thing you are requesting.

Incidentally, on the matter of information process, we, in addition to the mailings to the registrants on file, there is also literature distributed in 172 hospitals, 200-some additional clinics, in 136 readjustment counseling vet centers, and through the 400-plus contract readjustment counseling centers that are also in operation—in addition to which DVB, through the regional offices, is constantly distributing literature on this subject.

I can't imagine a veteran who reads the newspaper who isn't aware of the problem of agent orange, and whose curiosity hasn't long since been tweaked, and who must know that there is help available in VA hospitals.

Mr. SUNDQUIST. Dr. Custis, I don't have a problem with that from the mail I have been getting and from the meetings I have held. My problem is arriving at some conclusions, and you offered to do that. I appreciate that. Thank you very much.

Mr. PENNY. Mr. Burton.

Mr. BURTON. Thank you, Mr. Chairman.

Dr. Custis, when Representative Downey talked a while ago, he indicated that—and this is in response to what you just said—500,000 agent orange information pamphlets were distributed to VA facilities, but less than 9,000 were sent outside the system. We had over 2.5 million in the Vietnam war.

It seems to me that, even though the newspapers do carry a lot of accounts of what is going on with agent orange, they should be made aware of the dangers that are involved. Early detection in cancer, as I understand it, has a great deal to do with longevity. I have heard estimates as high as 90 percent of those who have early detection of cancer in their body can survive and have an average length life expectancy. It seems to me that, unless they are aware of the dangers of the exposure that they have experienced, that the real possibility exists that they will have cancer, for instance, and not be aware of it until it is too late. That is why I am concerned. Not that you haven't been trying to do the job, but that they should be contacted, either through the mail or some way, to make sure that they are aware of the dangers that are involved.

I don't think that the expense, from what I have heard today, the expense of sending a one-page letter out eliciting some kind of response from them, would be out of order, do you?

Dr. CUSTIS. Mailing to every veteran? I am not sure where you would go for the mailing list.

Mr. BURTON. When I was in the Army, I had—I still remember it, BR 16584353. That was my Army ID number. That was back in 1957. The social security numbers that we have are on file with the Internal Revenue and many departments of the Government. It seems to me that everybody who went in the service would be on file with the Department of the Army, Air Force or Navy, and we could send to them—especially those who were exposed to agent orange or in any area where agent orange was sprayed.

Dr. CUSTIS. This was discussed at one time and discarded as a project. There is no reason why we can't reconsider.

Mr. BURTON. Why was it discarded? I am just curious. The war has been over now for 10 to 12 years, and everybody is aware of the problem, and a lot of people haven't been contacted. I talked to a number of them this week.

Dr. CUSTIS. It was discarded because we could not identify an easy source for a complete mailing list of all veterans. We can go through service organizations, and we have, and the service organizations have sent their constituents, their members, a tremendous amount of information through their mailings.

There are other avenues. There could be, for example, mailings through the social security office. I don't know. Perhaps

Dr. Chesney has some ideas when he testifies as to whether DOD could be of any further help to us in terms of a veterans mailing list. But it is not an easy thing to come by.

Dr. SHEPARD. We have looked into this, Mr. Burton. You would think that the military must maintain active mailing lists or names and addresses of individuals who served in Vietnam. Unfortunately, that simply is not the case. If that were the case, we would not have had such difficulty in identifying individuals who served in Vietnam for purposes of conducting major epidemiological studies.

I have asked that question myself a number of times. Those records are not maintained in a computerized fashion. One can determine by examining personnel records at St. Louis which veterans served in Vietnam and which did not. But, believe me, there is no complete computerized list of veterans who served in Vietnam or a mailing list.

Mr. BURTON. I really find that extremely hard to understand. All the papers that we filled out back when I was in the service in the 1950's and it has gone on every since—when we had the Vietnam war, we had the massive drafting—and you say we don't have records of those who served in Vietnam? We don't have social security numbers of those people?

Dr. YOUNG. We don't have a master list, sir. We have all their records, of course. We could go to the military records centers and, over a number of years, probably 5 or more, and build, if we had the manpower and the dollars, that list that you are looking for. But it doesn't exist at present.

Mr. BURTON. But you don't have them filed by social security number and date of service?

Dr. YOUNG. Within the records center. You would have to go in and take out all of the Vietnam service from all of the Vietnam era and all of the other wars.

Mr. BURTON. So it would take 5 years, you think, and a lot of money?

Dr. YOUNG. Yes.

Likewise, we don't have records on who was exposed to agent orange in Vietnam. We simply don't know who was exposed and who wasn't.

Mr. BURTON. This must be a simple attitude, I suppose, but I envisioned that we would have these in a computer, and we would push a button and be able to send a letter to 2.5 million, and the cost would be less than what Congress spends in 1 day franking mail out of here, and we could have contacted all of them or at least made them aware of the danger. But you say that can't be done.

Dr. YOUNG. We began to computerize in the 1971, 1972, 1973 timeframe. At that point, we can pick up a lot of military. But, you see, there were an awful lot who served before then and we simply don't have them computerized at this time.

Mr. BURTON. Thank you.

Mr. PENNY. Thank you, Dr. Custis.

We have one last witness that we want to get to yet this morning. We appreciate your answers to our questions.

Mr. PENNY. Our next witness is Maj. Gen. Murphy A. Chesney, Deputy Surgeon General, Department of the Air Force.

General Chesney, if you would introduce those with you, we would appreciate it.

We are running short of time. If you could summarize, we will see to it that your entire testimony is submitted for the record.

STATEMENT OF MAJ. GEN. MURPHY A. CHESNEY, DEPUTY SURGEON GENERAL, DEPARTMENT OF THE AIR FORCE, ACCOMPANIED BY COL. GEORGE LATHROP, AEROSPACE MEDICINE DIVISION, BROOKS AIR FORCE BASE; AND DR. RICHARD ALBANESE, AEROSPACE MEDICINE DIVISION, BROOKS AIR FORCE BASE

General CHESNEY. Good morning, Mr. Chairman and members of the committee. I am Maj. Gen. Murphy A. Chesney, Air Force Deputy Surgeon General. I am accompanied by Col. George Lathrop and by Dr. Richard Albanese of the Aerospace Medicine Division at Brooks Air Force Base.

I thank you for the opportunity to present an update on the progress of the Air Force epidemiologic study of Ranch Hand personnel exposed to herbicide in Vietnam from 1962 to 1971.

The information that I will present today includes final study participation figures, an update of the mortality study, a description of some of the types of morbidity data which will be analyzed and which will be of special interest to this committee, and the dates on which we expect the reports to be available.

The Louis Harris and Associates contract for inhome questionnaire administration to the study participants was completed on November 15, 1982. Of the 2,878 subjects selected for the questionnaire and physical examination phases of the study, only two ranch handers and nine comparison subjects could not be located. This is using every method that we could. Therefore, our location rate for the baseline data group is 99.6 percent.

A total of 1,172 or 97 percent of the Ranch Handers, and 1,156 or 93 percent of the initial 1,241 comparison subjects, participated in the questionnaire. All comparison subjects who declined the questionnaire and/or the physical examination were substituted with willing subjects who were equally well qualified for inclusion in the study.

In addition to the study subject questionnaire, Louis Harris and Associates completed inhome interviews on 2,546 former or present spouses, and 84 next of kin of known dead study subjects. They also completed 84 telephone interviews on the population that refused to participate. Thirty-four Ranch Handers and 158 initial and/or control substitutes were classified as absolute questionnaire refusals in the study.

One thousand forty-five, 87 percent, of the Ranch Hand population and 940, 76 percent, of the initial comparison population participated in the physical examination. Two-hundred eighty-seven comparison substitutions also completed the physical examination prior to the contract completion date on December 15, 1982, for a total of 1,227 comparison participants.

In September of last year, I presented to this committee our initial mortality report based on deaths ocurring prior to January 1, 1982. The data that I am presenting today is an update of that initial report. The mortality analysis is an ongoing process, and additional deaths will be included in subsequent reports.

As of September 1, 1982, there were 67 documented deaths in the ranch hand group: 22 were killed in action; 18 accidental deaths; 3 suicides; 1 homicide; 3 malignant neoplasms, or cancer; 1 endocrine, nutritional, metabolic and immunity disorder; 14 diseases of the circulatory system; and 5 diseases of the digestive system.

For the same time period, there were 235 deaths among the comparison subjects. The larger number of comparison subject deaths is a result of the one-to-five ranch hand comparison subject mortality study design. No statistically significant differences in the crude death rates were found between the Ranch Hand and the comparison group.

The overall survival pattern of the Ranch Hand and the comparison group was contrasted to the 1978 U.S. white male population vital statistics. Both study groups continue to experience significantly less mortality than equivalently aged U.S. white males, an epidemiologic phenomenon called the health worker effect.

The refined analyses of more than 4 million pieces of information currently available will account for the effects of the exposure patterns, social habits, other medical factors, family history or predisposition to specific diseases, and time spent in Southeast Asia.

I would like to outline some of the data analyses we are going to accomplish which may give you a clearer understanding of how we will be assessing the overall health of the study population. These include mortality, assessments of general health, fertility/infertility, reproductive abnormalities, cancer, dermatologic, hepatic, psychologic, neurologic, and cardiovascular diseases. There are many other parameters which will also be reported.

This initial round of questionnaires and physicals will form the basis for the remainder of the study. Followup examinations will be at 3, 5, 10, 15, and 20 years.

We have concluded our initial mortality study. The data will be submitted to the advisory committee for review and should be available for public release on the 30th of June, 1983. The morbidity data—questionnaire and physical examination data—will be submitted for review and should be available for public release by early October 1983.

We will be happy to try to answer any questions. Thank you.

[The statement of General Chesney appears on p. 141.]

Mr. PENNY. Thank you, General Chesney.

First of all, I would like to submit a question for the record. We will submit it to you and ask that you provide a written response. The question concerns the composition of the advisory committee.

General CHESNEY. Yes, sir. We will provide a written response to that.

[The information appears on p. 144.]

Mr. PENNY. How is the Air Force collecting data to validate the exposure of Ranch Hand personnel to agent orange?

General CHESNEY. We are doing this as part of the questionnaire. We are developing a mathematical exposure index that we are working on to collect this data.

Let me ask Dr. Lathrop to tell you how we are doing that.

Mr. PENNY. Dr. Lathrop.

Colonel LATHROP. In addition to what General Chesney just said, we are also collecting detailed information on tour data, that is, the exact time each and every individual spent in Vietnam.

Further, we have conducted and plan more aircraft simulation studies with the simulant to attempt to get a handle on how the agent was dispersed throughout the aircraft while it was in flight. It is from this information, tour data and simulation, that we are hoping to construct an exposure index which will apply to each and every one of the flyers.

Further, we will be attempting to extend this to the ground folks as well so that all members of the Ranch Hand population will receive some sort of numeric as an exposure index. We will then attempt to correlate this index with any clinical end point so detected in the epidemiologic studies.

Mr. PENNY. How would you say the typical Ranch Hand exposure compares with ground soldier exposure?

General CHESNEY. Early on in our program, we did a crude mathematical calculation of this and ended up estimating that there were many hundreds of times more exposure to the Ranch Hand flying personnel than to the Army or Marine ground personnel.

Mr. PENNY. Did you calculate in the variable that Ranch Hand personnel, though perhaps receiving greater exposure, had opportunities to bathe or shower, whereas the ground soldier may have received a lesser exposure but they had no opportunity to clean themselves?

General CHESNEY. Yes, we looked at this. Skin absorption can be rather rapid. After the personnel came back, they had to debrief, do many other things, so it could be quite some time before they had a chance to shower. Many of them would fly in the same flight suit for 2 or 3 days, so they still would be in the same clothing. They would take it off and put something else on to go eat. But we should look at this, yes.

Mr. PENNY. I don't have any further questions, General Chesney, but Congressman Evans may have some questions that he would also like to submit to you. The committee would like response to those questions.

[The information appears on p. 144.]

Mr. PENNY. Mr. Sundquist?

Mr. SUNDQUIST. General Chesney, what is your conclusion on Ranch Hand right now?

General CHESNEY. We have made no conclusions at all. From the early mortality, it certainly seems that there has been no increase in death among our Ranch Hand flyers than would be expected in a comparable population that did not go to Vietnam. That is the only conclusion we can make so far.

Mr. SUNDQUIST. In your testimony, you have given a time for public release in October of this year in that regard.

General CHESNEY. Yes, sir.

Mr. SUNDQUIST. What about the other parts of the study in other regards? When will that be released? When will that be concluded?

General CHESNEY. The October release will be all we have done to date. We will continue to follow the ranch handers for mortality. At 3, 5, 10, 15, and 20 years, we will repeat the study if it is thought to be a worthwhile project in later years.

Mr. SUNDQUIST. So you are dealing only with mortality?

General CHESNEY. No, sir. I am sorry.

The mortality study will be released in June. The morbidity study will be released in October. We are dealing with both. But we will do repeat physical examinations and the questionnaires again in 3 years—we are about ready to start over—and then at 5 years, 10 years, and so forth.

Mr. MONTGOMERY. As a followup to the question that the gentleman from Minnesota asked, and that is that in testimony before another VA subcommittee, statements were made down playing Ranch Hand results because of the things that he talked about, the fact that they could take showers and clean up and all of that. Do you think that your study could be invalidated by that?

General CHESNEY. No, we do not. We think that our Ranch Handers were by far the most exposed of anybody in Vietnam. They were saturated with the material. They lived in it. Some of them drank it at parties. There was tremendous exposure compared to the——

Mr. SUNDQUIST. They drank it at parties?

General CHESNEY. Yes, sir. There was one of them that wore a T-shirt that says "I drank Agent Orange." There was tremendous exposure when compared to the personnel on the ground.

Mr. SUNDQUIST. But you are getting into all of the other areas such as children, the problem with other generations, all those areas?

General CHESNEY. Yes, sir. That data will all be released with the morbidity study in October.

Mr. SUNDQUIST. That will be released in October?

General CHESNEY. Yes, sir. The data on diseases, fertility, abortions, birth defects, etc. will be released when we have it compiled. We just have not gotten through it yet. There is too much there to get done quickly.

Mr. SUNDQUIST. I want to commend you on how fast you are getting through with that study. I think it is marvelous that we are going to have some answers.

General CHESNEY. Dr. Lathrop and his people are doing that. We have been pushing them very hard.

Mr. SUNDQUIST. I commend you.

Thank you.

Mr. PENNY. Mr. Burton.

Mr. BURTON. Thank you, Mr. Chairman.

What in the world would possess somebody to drink that stuff?

General CHESNEY. If I remember, the reporters were giving them a hard time about it being poison, and they put it in their cocktails and drank it. They didn't worry about it at that time.

Mr. BURTON. As far as Air Force personnel is concerned, what number do you estimate was exposed to agent orange? Do you have any rough figures?

General CHESNEY. Of Air Force personnel?

Mr. BURTON. Yes.

General CHESNEY. Totally?

Mr. BURTON. Yes.

General CHESNEY. Of course, we had 1,269 Ranch Handers who flew with the mission. There were a large number of other people who helped at times with the Ranch Hand operation. Our pilots were, of course, on the ground in Vietnam during the entire thing. We don't have a figure of how many were in Vietnam. I don't have it right now, but I can get that for the record, Mr. Burton.

Mr. BURTON. I am just curious. You have 1,172 as a figure for how many participated in the study.

General CHESNEY. Yes, sir.

Mr. BURTON. Have you attempted, or is there any way you could contact everybody who was exposed to agent orange, that worked on dropping this defoliant in Vietnam, such as contacting them by mail?

General CHESNEY. No, sir. That is a real problem. We had social security numbers and addresses at one time on all of these people. The average person in the United States moves every 5 years. When they were discharged, getting their present address, even through their social security number, has been a problem because of the Privacy Act. If you remember, we had to get special permission from Congress to even find the ranch handers through the Internal Revenue Service, via NIOSH, which has the best method of keeping track of people by their social security number right now.

Mr. BURTON. Would you recommend that we try to get the Privacy Act lifted, at least to contact those military personnel who were exposed to agent orange in Vietnam? Do you think that would be a good idea, to send them a letter and get an updated address by using the social security numbers through the Internal Revenue Service?

General CHESNEY. Yes, sir, I think that could be done, and probably would be beneficial to the veterans to know what we are doing and what all of the studies are. Yes, sir.

Mr. BURTON. You think it would be a good idea then?

General CHESNEY. I think it would be a good idea to keep them informed, yes.

Mr. BURTON. Do you think it might ultimately result in increasing their longevity by letting them know that they might possibly obtain cancer as a result of being exposed to agent orange?

General CHESNEY. I think it is too early to say. We do not have enough information right now to say whether there will be an increase in cancer or any other diseases at the present time.

Mr. BURTON. But you do think it would be a good idea to inform them of the possible dangers.

General CHESNEY. Yes, sir, I sure do, and to get physical examinations and other treatments as necessary.

Mr. BURTON. Thank you very much.

General CHESNEY. Yes, sir.

Mr. PENNY. Mr. Burton, just for the record, I want to stress that it is the Veterans' Administration's policy that anyone who went to Vietnam is considered to be exposed because we don't have accurate data on who may or may not have been exposed. So the list of

those who we want to notify in a special way is a pretty extensive listing right now.

Mr. BURTON. Mr. Chairman, May I ask you a question? I don't know what the procedure to be followed here is, but I would like to put in the record my request that we ask the Privacy Act be lifted so that we can get updated addresses for as many of the personnel that were in Vietnam as possible so that they can be contacted, so that we can give them as much information as possible on the dangers they might have incurred as a result of exposure to agent orange.

Mr. PENNY. Mr. Burton, we can and will include your request in the record. The staff will bring that request to the chairman of the committee, Mr. Montgomery.

Mr. BURTON. Thank you.

Mr. PENNY. I have one last question that occurred to me dealing with the statistical analysis of deaths in the ranch hand group and the control group.

Most of the statistics look as if they are comparable. In one case, I think it was deaths as a result of digestive disorders. The Ranch Hand group, maybe some of those who drank it, had 5 deaths and the control groups, which was 5 times larger, had 11 deaths due to digestive disorders.

How do you square that? That seems like one example out of all the deaths listed that jumps out as being inconsistent.

Colonel LATHROP. Mr. Chairman, we are going to look at that very carefully over the years. Certainly these folks drank more than agent orange, the quality——

Mr. PENNY. I maybe shouldn't have included that aside in my question.

But it does seem curious that all of the other statistics do appear to be proportional but, in that case, it is out of kilter. I was just wondering if you could attribute that to anything at this point? Will you be following up on that inconsistency?

Colonel LATHROP. Yes.

Also, for your information, you should look at the malignancies where you see a distinct shortcoming in the number of cancers in the Ranch Hand group, which is quite interesting to us as of this point in time. Again, that is another issue we will be tracking. We have detected no soft tissue sarcomas in terms of mortality to this point in time.

Mr. PENNY. I want to thank you again for your testimony before the committee this morning.

I mentioned earlier that Congressman Evans would perhaps like to submit additional questions to you, and you can then give us written responses. Other members of the committee or the committee staff, through the Chairman, may also want to submit questions to you and, if so, we would appreciate written responses to those so we could include them in the record.

[The information appears on p. 144.]

Mr. PENNY. I have one last request of the committee. Mr. Hillis has asked that his opening statement be included in the committee record. Without objection, we will see to it that that is included in our record.

If there are no further questions, thank you again for your testimony.

I thank everyone for appearing here today.

The subcommittee is adjourned.

[Whereupon, at 11:10 a.m., the subcommittee was adjourned.]

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APPENDIX

COMP: PRESUMPTIONS: AGENT ORANGE

April 11, 1983

Sir Robert Cotton, KCMG
Ambassador
Embassy of Australia
Washington, D. C. 20036

Dear Ambassador Cotton:

Thank you for your letter of March 30 and for the attention you have given to our Subcommittee on Oversight and Investigations hearing on September 15, 1982.

I am delighted that you have reviewed the testimony presented at that hearing and have taken time to comment on some of the testimony presented at that hearing. We have additional hearings scheduled on the subject of Agent Orange on May 3rd. At that time I intend to have your comments inserted in the record so they will be made a part of the permanent hearing record. I think it is extremely important that the record be clarified. I assure you that will be done.

I am most grateful for the cooperation we have received from the government of your country. We were delighted to be able to sit down with various officials in Australia when we were there recently to discuss the Agent Orange issue and other veterans related issues. The meeting was most helpful to those of us who attended.

Sincerely,

G. V. (SONNY) MONTGOMERY
Chairman

MF: clg
cy to Jack McDonell

AMBASSADOR
SIR ROBERT COTTON, KCMG

EMBASSY OF AUSTRALIA
WASHINGTON, D. C.

30 March, 1983

APR 01 1983

Dear Mr Montgomery,

The record of the September 15, 1982 hearing before the Subcommittee on Oversight and Investigation of the Committee on Veterans Affairs, House of Representatives, has come to the notice of the Department of Veterans' Affairs in Canberra. The Department has suggested that we invite the attention of interested people in the U.S. to the information detailed in the attached paper.

The Embassy recently received a letter from Larry Don Shaw, State of Texas House of Representatives. Mr Shaw, who had apparently heard the same claim that "Australia has recognised 70 per cent of its Agent Orange disability claims", asked for details about this and about the report that Australia "is taking care of veterans' children". As this may be of interest to you also, I attach a copy of the information provided to Mr Shaw.

I trust that this letter will help to clarify the Australian position.

Yours sincerely,

(Robert Cotton)

Honorable G. V. (Sonny) Montgomery,
Chairman,
Subcommittee on Oversight and Investigations,
Committee on Veterans Affairs,
House of Representatives,
WASHINGTON, D.C.

HEARING BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS OF THE COMMITTEE ON VETERANS AFFAIRS, HOUSE OF REPRESENTATIVES, SEPTEMBER 15, 1982 -
COMMENTS ON STATEMENTS MADE ABOUT THE AUSTRALIAN POSITION ON "AGENT ORANGE" CLAIMS

At page 58 of the record (serial number 97-78), Mr Lewis Milford of the National Veterans Law Center is quoted as saying :

> "... the Australian case has been mentioned, I think it is important to point out that in the last VA Advisory Committee meeting, the Minister from Australia said that more than 70 percent of veterans from Australia have had their claims granted on the basis of agent orange. The reason for that is that the Australian system contains an element of fairness that is missing in the VA system. In the Australian system, the Government has the burden of disproving that a health problem was caused by agent orange".

Later in the record Representative Margaret M. Heckler is quoted as referring to "the Australian example cited by Mr Milford".

2. Mr Milford's statement shows that there have been significant misunderstandings of the Australian circumstances.

3. No Australian Minister has been present at a VA Advisory Committee meeting. The meeting in question was attended by the Secretary of the Department of Veterans' Affairs, Mr Volker, whose speech is included at pages 110-113 of the record in serial number 97-78. It will be seen that there is no mention in his speech of any percentage of claims being granted "on the basis of agent orange".

4. A possible explanation for the reference by Mr Milford to "70 percent" is that Mr Volker may have mentioned that some 70 percent of claims under the Australian "repatriation" system are successful. That percentage related not to Agent Orange nor even to Vietnam veterans as such, but to claims by veterans of all conflicts, whose disability claims were being accepted by Repatriation Boards in about 70 percent of cases.

5. As to Vietnam and the chemical issue, some specific information can be given. Because veterans naturally do not always know what chemical may have been used at a particular time, statistics are maintained by State Branches of the Department of Veterans' Affairs on claims where the veteran makes any reference to possible exposure to chemicals in Vietnam, rather than to the individual herbicide Agent Orange alone. As at 31 January 1983, a total of 1,327 claims, mentioning possible chemical exposure had been lodged at the initial level (the Repatriation Boards). Of those claims,

478 were accepted, 627 rejected, and 222 were still awaiting determination by Boards. In almost all of those cases it was unnecessary for Boards to determine whether diagnosed disabilities were linked to chemical exposure. The statistics show that one of the 478 accepted cases was accepted by a Board on chemical exposure grounds. An Army veteran had been treated for creosote and dieldrin burns to both eyes during Vietnam service. The Board allowed his claim for chronic conjunctivitis after noting the departmental medical officer's opinion that the burns could well have been a causal factor in the development of the condition.

6. According to the Department of Veterans' Affairs State Branch statistics, one case was accepted on chemical grounds on appeal to the Repatriation Review Tribunal. The acceptance provided a pension to a widow whose husband had died of lymphoma. When the claim was first made to the Department of Veterans' Affairs, the departmental medical officer's opinion was that on all the available evidence there was no demonstrable relationship between exposure to Agent Orange and the development of malignant lymphoma in man. The veteran's claim was then rejected by a Repatriation Board and on appeal was rejected by the Repatriation Commission. When a further appeal was made to the Repatriation Review Tribunal, the Tribunal, referring inter alia to

- the Swedish (Hardell) research on lymphoma and exposure to chemical substances

- Court interpretations of the Australian Repatriation legislation

said it was not satisfied beyond reasonable doubt that there were insufficient grounds for granting the claim. (The legislation requires a determining authority to grant a claim or allow an appeal unless the authority is so satisfied). A further comment by the Tribunal in this case is of relevance to the remark by Mr Milford relating to the standard of proof in the Australian Repatriation system. The Tribunal said :

> " It may be that if the Tribunal were required to be satisfied that, on any standard of proof normally invoked in civil proceedings, the suggested causal relationship between the toxic chemicals to which the Applicant may have been exposed on service and his particular type of lymphoma had been proved to exist we could not, on the evidence before us, be so satisfied. "

AMBASSADOR
SIR ROBERT COTTON, KCMG

EMBASSY OF AUSTRALIA
WASHINGTON, D. C.

30 March, 1983

Dear Mr Shaw,

The Australian Department of Veterans Affairs has asked me to respond to your letter of February 11, 1983 regarding Vietnam veterans.

In regard to your first question on Australia's treatment of "Agent Orange" disability claims, you quoted the same figure ("70 per cent of claims recognised") as mentioned by Mr Milford of the National Veterans Law Center before the Subcommittee on Oversight and Investigations of the Committee on Veterans Affairs, House of Representatives, in Washington on September 15, 1982. You will be interested in the attached copy of our letter to the Subcommittee's Chairman on this matter.

You also expressed interested in the Australian program of assistance to veterans and the report that Australia "is taking care of veterans' children". The information which follows has been supplied by the Department of Veterans' Affairs in Canberra.

In Australia, compensation for veterans is provided under a body of legislation known as the Repatriation legislation. This provides for pensions, medical and hospital treatment and other benefits for eligible beneficiaries. The system is applied in similar fashion to veterans of all conflicts.

Under the Australian system, individual veteran's claims are investigated and determined by independent determining authorities. Where a claim is accepted, free treatment is provided for accepted disabilities and a pension is granted in accordance with the assessed extent of incapacity. There is provision for appeal to independent reviewing authorities against unfavourable decisions and in certain circumstances appeal is allowed to the Federal Court of Australia and ultimately to the High Court of Australia.

The Repatriation legislation provides that veterans' claims must be granted unless the determining authority is satisfied beyond reasonable doubt that there are insufficient grounds for granting the claim. There is no automatic presumption that any condition is service-related. Each claim is assessed on its merits.

In certain specified cases, benefits for eligible veterans' children are available under the Soldiers' Children Education Scheme, about which a short explanation is enclosed. There are also small allowances known as dependants' pensions for children of entitled veterans. These benefits apply to the children of entitled veterans of all conflicts. However, the context of your letter suggests that you are referring to situations where veterans claim or fear that abnormalities in their children are related to Vietnam service. There is no benefit provided in respect of such a claim. No link has been established between veterans' Vietnam service and abnormalities in children. A study was recently conducted by the Commonwealth Institute of Health, University of Sydney, which found no increased risk of fathering a deformed child as a result of Australian Army service in Vietnam. A copy of the study report is enclosed.

Several arrangements have been introduced especially to assist Vietnam veterans. The Vietnam Veterans Counselling Service provides a focus for advising these veterans and their families. The facilities to which the Service may refer clients includes genetic counselling. Without additional cost to themselves, Vietnam veterans may be given urgent medical treatment and in certain circumstances their families may be provided with emergency treatment in Repatriation hospitals on referral from the Counselling Service.

You were also seeking the names of individuals who have sponsored veterans' legislation. In Australia, legislation of this nature is generally sponsored by the Minister for Veterans' Affairs, who is a member of the Parliament. There is no Parliamentary Committee dealing solely with veterans' issues. However, the Senate Standing Committee on Science and the Environment recently conducted an inquiry into pesticides and the health of Australian Vietnam veterans. A copy of that Committee's report is enclosed.

I trust that the information provided will be of assistance. Should you have any further enquiries I suggest that you direct them to the Secretary, Department of Veterans' Affairs, P.O. Box 21, Woden, A.C.T. 2606, Australia.

Yours sincerely,

(Robert Catton)

Honorable Larry Don Shaw,
State Representative,
State of Texas House of Representatives,
P.O. Box 2910
AUSTIN, Texas 78769

EDUCATION AND TRAINING

Soldiers' Children Education Scheme

The objects of this Scheme are to assist and encourage eligible children to acquire a standard of education compatible with their aptitude and to provide them with a suitable vocation in life.

Eligible children

Children of a veteran:

- whose death has been accepted as service-related; or
- who died from causes not service-related but was receiving at the time of his death; or is subsequently adjudged to have been entitled to receive, a pension at—
  the Special Rate for total and permanent incapacity or for blindness; or
  one of the rates payable to double amputees; or
- who, as the result of service, is blinded or is totally and permanently incapacitated.

General benefits

From the commencement of primary education until the child reaches twelve years of age, school requisites and fares are provided. From the commencement of secondary education, or from the age of twelve years, whichever is the earlier, the form of assistance changes and, while the child continues with primary or secondary education, an education allowance is payable.

Specialised education

On completion of general education, further assistance may be given to undertake a course of specialised education or training to fit the child for a career.

These courses include:

- professional—degree or diploma courses (including theological training) at universities, colleges of advanced education and technical colleges;
- cadet and pupilage training—training combined with employment, e.g. nursing, journalism and other vocational training;
- industrial—including apprenticeship training and other approved courses of trade and business training; and
- agricultural—training at an agricultural college.

As mentioned, education allowances may be payable in respect of children over twelve years of age, and under certain circumstances children are also provided with books and equipment. Their fees and fares are paid while studying for advanced courses.

Hearings Subc on O & I

May 12, 1983

Ms. Kae Rairdin
Acting Deputy Under Secretary for
Intergovernmental Affairs
Acting Chair, Agent Orange Working Group
Office of the Secretary
Department of Health & Human Services
Washington, D. C. 20201

Dear Ms. Rairdin:

Thank you for your letter of May 10th, enclosing a copy of the April 11, 1983 revision to "Update on Agent Orange Fact Sheet".

The April 11th revision will be included in the Subcommittee on Oversight and Investigations May 3rd hearing record in lieu of the February 23rd version.

I appreciate your calling the revision to my attention.

Sincerely,

G. V. (SONNY) MONTGOMERY
Chairman

bpd

DEPARTMENT OF HEALTH & HUMAN SERVICES — Office of the Secretary

Washington, D.C. 20201

April 11, 1983

MEMORANDUM TO: All State Veterans Departments/
State Agent Orange Commissioners/
Veterans Service Organizations and
Coordinators, etc.

SUBJECT : Update on Agent Orange Fact Sheet

The attached Fact Sheet has been updated and revised, since the February 24, 1982 release and was compiled with the assistance of several members of the Science Panel of the Cabinet Council Agent Orange Working Group. It provides a listing of Federal Research into two broad categories:

a) Human Studies; and,
b) Other Studies.

This Fact Sheet may be helpful to you and your organization.

Please circulate to any group you represent.

Dr. Peter E.M. Beach
Director of Veterans Affairs/HHS
Staff Director
Agent Orange Working Group

Attachment

CABINET COUNCIL ON HUMAN RESOURCES

WHITE HOUSE
AGENT ORANGE WORKING GROUP
(WHAOWG)

FACT SHEET
ON SCIENTIFIC RESEARCH
OF THE FEDERAL GOVERNMENT

Membership:

- Department of Health & Human Services (Lead Agency)
- White House Office of Policy Development
- White House Office of Science & Technology Policy
- Office of Management & Budget, Executive Office of the President
- Council of Economic Advisors
- Department of State
- Department of Defense
- Department of Agriculture
- Department of Labor
- Veterans Administration
- Environmental Protection Agency
- ACTION

Observer:

- Congressional Office of Technology Assessment

AGENCY CONTACTS ON FEDERAL RESEARCH ON AGENT ORANGE

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Mr. Bart Kull, HHS
Alternate Chair and Chair, Public Affairs Panel
(202) 245-6156

Dr. Carl Keller
Temporary Chair, Science Panel
Epidemiologist
National Institute of Environmental Health Sciences
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(301) 344-3533

Dr. Donald Barnes
Environmental Protection Agency
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This Fact Sheet of Agent Orange Research was compiled by the Agent Orange Working Group to inform the interested public about current U.S. Federal Government research on phenoxy herbicides and their contaminants. The list describes ongoing research and demonstrates the breadth of research efforts. Interested persons may obtain further information on these studies by contacting the representative, as listed in the Fact Sheet, from each Federal agency conducting research.

This Fact Sheet, describing the sixty-four federal studies and research projects completed and underway, is a clear illustration of the time and effort and funding that has been expended in the Federal arena and demonstrates the government's positive effort to seek answers to the Agent Orange question.

The Agent Orange Working Group has the responsibility for overseeing such research and disseminating information to the public as it becomes available. In light of this mandate, the Working Group has compiled this list. The Working Group will also assure that research findings are promptly made available to the public as data are gathered and analyses are completed.

CABINET COUNCIL ON HUMAN RESOURCES
AGENT ORANGE WORKING GROUP

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY					STATUS		
STUDY TITLE	Mortality	Morbidity	Cancer	Reproduction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES								
NIOSH Investigation of Leukemia Cluster in Madison County, Kentucky Allegedly Associated with Pentachlorophenol Treated Ammunition Boxes			X				X	Publication Oct 83
CDC Birth Defects and Military Service in Vietnam Study				X			X	Late 1983
NIOSH Dioxin Registry	X		X				X	Late 85
NIEHS Establishment and Maintenance of an International Register of Persons Exposed to Phenoxy Acid Herbicides and Contaminants	X		X				X	Indefinite
NIOSH Soft Tissue Sarcoma Investigation	X		X				X	Indefinite
NCI Case Control Study of Lymphoma and Soft Tissue Sarcoma			X				X	Late 84
NCI Study of Mortality Among Pesticide Applicators from Florida						X		Publications in Press

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY / STUDY TITLE	TYPE OF STUDY					STATUS		
	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES cont'd								
*CDC Epidemiologic Study of Ground Troops Exposed to Agent Orange during the Vietnam Conflict	X	X	X	X			X	1987
VETERANS ADMINISTRATION								
Vietnam Veteran Mortality Studies	X						X	Late 1984
Vietnam Veteran Identical Twin Studies		X		X			Proto-col	Initial 1984
Survey of Patient Treat-ment File for Vietnam Veteran In-Patient Care		X	X				X	Initial 1983 Survey
Agent Orange Registry Examinations		X	X				X	Indefinite
TCDD in Body Fat of Vietnam Veterans and Other Men		X		X	X	X		Publication in Preparation
Retrospective Study of Dioxins and Furans in Adipose Tissue of Vietnam-Era Veterans					X		X	1985

*Mandated to the VA by P.L. 96-151 Sec. 307. Transferred from VA to CDC under Interagency Agreement January 14, 1983.

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY					STATUS		
STUDY TITLE	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF DEFENSE								
Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicide Orange (Air Force Health Study)	X	X	X	X			X	Baseline 1983 Complete 1999
Armed Forces Institute of Pathology Agent Orange Registry of Vietnam Veteran Biopsy Tissues			X				X	Indefinite
ENVIRONMENTAL PROTECTION AGENCY								
Report of Assessment of a Field Investigation of Six-Year Spontaneous Abortion Rates in Three Oregon Areas of Relation to Forest 2,4,5-T Spray Practices				X		X (Published)		
National Pesticide Monitoring Project of Human Adipose Tissue					X		X	Indefinite (Annual Reports)

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY					STATUS		
STUDY TITLE	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF AGRICULTURE								
A Case Control Study of the Relationship Between Exposure to 2,4-D and Spontaneous Abortions in Humans				X		X		
Exposure Measurements of Mixers, Loaders and Applicators of 2,4-D on Wheat					X		X	1982
Exposure of Forest Workers to Ground Applications of 2,4-D					X		X	1983

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES							
Bioassay of Octachlorodibenzo-p-dioxin	X					X	
Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Swiss Webster Mice	X					X	
Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Osborne-Mendel Rats and B6C3F1 Mice	X				X		
Bioassay of a Mixture of 1,2,3,6,7,8- and a Mixture of 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxins for Possible Carcinogenicity	X					X	
Comparative species Evaluation of Chemical Disposition and Metabolism of 2,3,7,8-Tetrachlorodibenzofuran (TCDF) in Rat, Monkey, Guinea Pig and Two Strains of Mice	X				X		
Neurotoxicity of 2,4,-D in Rodents	X				X		

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES cont'd							
Studies of the Chemical Disposition and Metabolism of Octachlorodibenzodioxin (OCDD)	X					X	
Effects of Agent Orange Components on Male Fertility and Reproduction		X			X		
Mutagenicity Studies of TCDD, 2,4-D; 2,4,5-T and Esters of 2,4-D and 2,4,5-T		X				X	
Implications of Low Level Exposure of Dioxins		X				X	
Mechanisms of Toxicity of the Chlorinated- p-dioxins		X				X	
Research Toward Understanding the Molecular Level Mechanisms of Toxicity of TCDD and Related Compounds	X					X	
Synthesis of Selected Tetrachlorodibenzo-p-dioxins and Related compounds as Analytical Standards			X			X	

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES cont'd							
Matrix Effect and Sub Parts-per-billion Quantitative Analysis of TCDD by Mass Spectrometry - With Special Reference to Milk	X		X			X	
Toxic Actions of Tetra-chloroazobenzene Dioxins	X					X	
Xenobiotic Induction of Pleiotropic Responses in Liver	X					X	
Molecular, Biochemical Actions of Chlorinated-p-dioxins	X					X	
Mechanism(s) for Toxicity of Chlorinated Dibenzo-dioxins	X					X	
Modular basis of Dioxin toxicity in keratinocytes (NIEHS)		X				X	8/84

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
ENVIRONMENTAL PROTECTION AGENCY							
Evaluation of Large Scale Combustion Sources		X	X			X	
Evaluation of Municipal Waste Combustors		X				X	
Bacterial Decomposition of TCDD		X				X	
Investigation of Bioavailability to Fresh Water Fish of TCDDs in Fly Ash	X	X				X	
Analysis of Environmental Samples for PCDDs and PCDFs		X	X			X	
DEPARTMENT OF AGRICULTURE							
Survey of Phenoxy Herbicide Use by Agricultural Commodity				X		X	
Survey of Phenoxy Herbicide Literature				X		X	Annaul Bibliographies Published

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF AGRICULTURE cont'd							
Photolysis of 2,4,5-T			X			X	
Biological and Economic Assessment of 2,4,5-T and Silvex				X		X	
TCDD Residue Monitoring in Deer	X	X			X		Report in Preparation
DEPARTMENT OF DEFENSE							
Environmental Chemistry of Herbicide orange and TCDD		X	X			X	Indefinite
VETERANS ADMINISTRATION							
Review of Literature on Herbicides, Including Phenoxy Herbicides and Associated Dioxins				X	Published 1981		Annual Update Approved
Urinary 6-Hydroxy Cortisol: Physiological and Pharmacologic Studies (Including Agent Orange)	X					X	1982
Effect of TCDD on Lipid Metabolism	X					X	1983

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
VETERANS ADMINISTRATION cont'd							
Mechanisms of Dioxin Induced Toxicity Using the Chloracne Model - Phase I	X				X		Publication in Press
Behavioral Toxicity of An Agent Orange Component 2,4-D	X					X	1984
Effects of 2,3,7,8-Tetra-chlorodibenzodioxin on Hepato-biliary Function in Animals	X					X	1985
Mechanism of TCDD Absorption and Toxicity on Lipid and Lipoprotein Metabolism	X					X	1985
Metabolism of the Herbi-cides Present in Agent Orange and Agent White	X					X	1985
TCDD Exposed Rhesus Monkeys: Effects on Behavior and Stress Hormones	X					X	1985

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
VETERANS ADMINISTRATION cont'd							
Neuromuscular Toxicity of Agent Orange	X					X	1985
Mechanisms of Dioxin Induced Toxicity Using the Chloracne Model - Phase II	X					X	1985
Effects of Low Dose TCDD on Mammalian Chromosomes and Liver Cells	X					X	1986
Mechanism of Porphyria Caused by TCDD and Related Chemicals	X					X	1986
Effects of Agent Orange on Sleep	X					X	1986

STATEMENT OF JOHN F. SOMMER, JR., DEPUTY DIRECTOR
NATIONAL VETERANS AFFAIRS AND REHABILITATION COMMISSION
THE AMERICAN LEGION
TO THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON VETERANS AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
MAY 3, 1983

Mr. Chairman and Members of the Subcommittee:

The American Legion appreciates this opportunity to present our views on Agent Orange research; a priority issue of this organization, and a matter of utmost importance to Vietnam veterans and their families.

There is a considerable amount of research relating to various health effects of Agent Orange exposure, aside from the study mandated by PL 96-151, that is either currently underway or in the planning stages, and we will comment on several of the projects that the Legion feels are significant.

Mr. Chairman, The American Legion was extremely pleased that the Centers for Disease Control took over the responsibility for the PL 96-151 study when the Interagency Agreement between the Veterans Administration and the Department of Health and Human Services was signed on January 14, 1983. The transfer fulfilled a long and intense effort by the Legion to have the study completed by a scientific agency that is independent of the VA.

We are encouraged by the manner in which CDC has progressed since accepting the responsibility for the study. Within a matter of days following the signing of the Interagency Agreement, CDC officials met with The American Legion to discuss the study and elicit input and recommendations relating to the research.

At the same time, we offered the cooperation of the Legion in encouraging the participation of Vietnam veterans in the study, as we are keenly aware of the importance that such participation will play in the success of the CDC studies.

In reviewing the protocol outline prepared by CDC when it first became available to the Legion in early February, it was obvious that a great deal of what appears to us to be highly competent work was achieved in a relatively short period of time.

CDC has recommended that two historical cohort studies be completed; the Agent Orange study, and a broader Vietnam experience study. Authority for the expansion of the study was provided under PL 97-72, and CDC was quick to realize the importance of studying the possible health effects that other herbicides such as Agents White and Blue (picloram and cacodylic acid, respectively), other chemicals, medications, or environmental hazards or conditions, that existed in Vietnam could have had on the veterans who served in RVN.

The studies will each be comprised of three major components; a mortality study, a health and exposure questionnaire, and a clinical and laboratory assessment.

The Agent Orange study is to consist of 3 cohorts, and the Vietnam experience study 2 cohorts. The cohorts are to be composed of 6,000 individuals each, selected pursuant to a thorough review of the military records by the Army Agent Orange Task Force (AAOTF). The American Legion is pleased to have learned that CDC has assigned a Public Health Advisor to work full-time with the AAOTF, as we

have long stressed the importance of a liaison between this dedicated group of experts in the area of military records and the agency responsible for the development of the protocol and the conduct of the Agent Orange study.

The AAOTF plays an integral part in the Agent Orange research efforts, and especially with respect to the foregoing studies that are currently being implemented by CDC. Without the military records from Vietnam the study cohorts could not be selected, thus it would be impossible to carry out the studies. It is unfortunate that the unobtrusive nature of the work performed by AAOTF detracts from the actual importance of the responsibilities that the Task Force bear. The American Legion is concerned that because of this inconspicuousness, not enough emphasis is placed on the priority nature of the Army Agent Orange Task Force's role in the ongoing research.

The Legion understands that CDC has received approval for the requested positions needed to carry out the studies, and they are in the process of recruiting the necessary staff. However, this has not detracted from the ongoing development of the protocols for the two studies which are expected to be completed and available for peer review by the end of May.

CDC is also looking at the possibility of conducting case-control studies of the incidence of soft tissue sarcomas and lymphomas. The American Legion is aware of the importance of such case-control studies, particularly with respect to soft-tissue sarcomas, and we urge that they be conducted by, or under the

responsibility of CDC.

Mr. Chairman, as we stated at the outset, the Legion is both encouraged and pleased by the progress made by CDC in a relatively short period of time. In addition, CDC has held to a committment made at the time the agency assumed responsibility for the study - to seek the input and recommendations of The American Legion and other veterans organizations, and to maintain open lines of communication. For this we are appreciative.

The only other thing that we can ask is that CDC release all relevant findings as they become available during the studies. Vietnam veterans are concerned about the effects of Agent Orange and other environmental hazards and want the facts as best they can be established. The American Legion's goal is to make absolutely sure that these concerns and apprehensions are promptly and accurately addressed.

Mr. Chairman, we will now offer comment on some of the other Agent Orange related research projects that are currently being carried out by the Veterans Administration, other Federal agencies, and by private entities under contract to the government. The American Legion is monitoring all of these studies, within the limits of our capabilities, and it is hopeful that the results of each of the projects will complement the total Agent Orange research effort.

The examination of Ranch Hand personnel, those Air Force personnel who were directly involved in Agent Orange spraying missions in Vietnam, has been completed, and we understand that

an excellent rate of participation among the over 1200 individuals who served in that unit was experienced. The study is composed of three elements; a mortality study, a morbidity study, and a follow-up. The questionnaire involved in this investigation was administered under contract by the Harris Organization, and the physical examinations and laboratory studies were conducted by the Kelsey-Seybold Clinic in Houston, Texas on a contract basis. A mortality report is expected to be issued in the near future, and preliminary reports on the data obtained from the examinations and questionnaires later in 1983. Follow-up examinations will be completed at 3,5,10,15 and 20 year points.

The Centers for Disease Control in Atlanta is conducting a study that is designed to determine whether or not veterans who served in Vietnam are at a higher risk of producing offspring with serious birth defects. The test population consists of approximately 7500 babies with birth defects born in the Atlanta area between 1968 and 1980, the identity of which were extracted from the CDC birth defect registry. Where possible, the parents of the subject babies are being interviewed to determine the factors which may be responsible for the occurrence of the abnormalities, including service in Vietnam and possible exposure to toxic substances which may be attributable thereto. Reportedly, CDC has experienced a good participation rate in this study. However, we understand there are some problems in locating a small number of veterans who were previously interviewed, and are now being contacted for follow-up interviews, due to the fact

they have moved. The results of this study are expected to be available by the end of 1983.

The Armed Forces Institute of Pathology, since 1978, has been collecting pathologic material including tissues extracted during surgical procedures and during autopsy procedures, of Vietnam veterans from Veterans Administration medical centers, Armed Forces hospitals, and from medical facilities in the private sector, for the purpose of surveying the illnesses that have been incurred by these Vietnam veterans. It was recently reported that 1200 cases have been submitted to AFIP to date, and an additional 600 are forthcoming. The project is being divided into two phases. The first phase is the collection and evaluation of the cases of veterans who served on active duty in Vietnam from 1962 to 1974. The second phase consists of the collection and evaluation of the cases of veterans or active duty personnel who did not serve in Vietnam. This group will serve as matched controls for the cohort included in phase one. We find it interesting to note the different diagnoses that have been made thus far. There are 86 different diagnoses of the skin, 15 varied liver diagnoses, 16 different benign tumor diagnoses, and 30 diagnoses of malignant tumors. There have been an additional 173 diagnoses made, not including the foregoing. As for the collection of the pathologic tissue, 1088 samples are submitted by VA medical centers, 74 of the cases involved veterans in civilian hospitals, and the remaining 4 percent were submitted by Federal hospitals, for the most part Air Force. The tissue samples have been sent to AFIP from 46 States, and 99 percent of

the cases involved male veterans. The completion date of this study is indefinite.

The Veterans Administration has begun preliminary work on a Vietnam veteran mortality study which will draw a comparison of death rates and the causes of death between groups of veterans who served in Vietnam and those who did not. VA estimates that this study will be completed in mid 1984.

An identical twin study is currently being designed by the VA at the St. Louis VAMC. The proposed study will compare a significant number of pairs of twins; one of whom served in Vietnam and the other who was in the military but was not in RVN, to examine the effects of the Vietnam experience. This study is expected to be concluded in mid 1984.

Ten additional research projects have recently been approved by the Administrator of Veterans Affairs, selected from proposals submitted by individual investigators working in VA medical centers, in response to a request for new research proposals issued by VA Medical Research Service, which specified a biochemical, physiological or toxicological focus on the delayed effects of exposure to Agent Orange and other herbicides. The research projects for the most part involve animal studies, but human tissue cultures will be analyzed in some of the experiments, such as biochemical studies of fat metabolism. The new projects are supported for up to five years with VA research funds in excess of $2 million.

The VA has established an Environmental Medicine Monograph Series which was designed to provide useful information of a

23-542 O - 83 - 6

scientific nature on environmental and occupational factors that have or may have affected the health of Vietnam veterans. The Monographs that are to be initiated in Fiscal Year 1983 include Agent Blue (cacodylic acid), Human Exposure to Phenoxy Herbicides, Birth Defects (genetic screening and counseling), and Chloracne. The American Legion will continue to monitor the development of these and other monographs that have been proposed for future implementation.

The Legion is also following with interest several other ongoing studies involving dioxin exposure, including the National Institute for Occupational Safety and Health (NIOSH) Dioxin Registry, the NIOSH Soft Tissue Sarcoma Investigation, and the National Cancer Institute's Case Control Study of Lymphoma and Soft Tissue Sarcoma.

Mr. Chairman, we have presented this compendium of major Agent Orange and related research projects to demonstrate the magnitude of the total effort being put forth to determine the possible consequences of exposure. Needless to say, the picture is changing and it is apparent to the Legion that progress is being made. As was stated earlier, the Centers for Disease Control has moved quickly on the preliminary implementation of the study mandated by PL 96-151, and the expansion of that study authorized by PL 97-72. The agency has determined the complexities involved in such problematic research, and has moved forward to address the studies. We urge that CDC continue to act in an expeditious but cautious manner as they complete the protocols for the Agent

Orange and Vietnam experience studies.

Mr. Chairman, The American Legion thanks you for your timeliness in scheduling hearings on this issue that is of such extreme importance to Vietnam veterans, as time is of the essence in this critical matter, and the continued vigilance of this Subcommittee will certainly serve to ensure that the research discussed today will continue to be conducted without delay.

You may be assured that The American Legion will continue its involvement in every aspect of the issue of Agent Orange.

Mr. Chairman, that completes our statement.

STATEMENT OF TENNESSEE SELECT COMMITTEE FOR THE STUDY OF VETERANS AFFAIRS: REPRESENTATIVE U. A. MOORE, REPRESENTATIVE RALPH YELTON, AND JEFF G. DORAN, CHIEF STAFF ASSISTANT

Good morning, I am pleased to be here today to discuss findings of Tennessee's study on Agent Orange and to make recommendations as a result of that study.

In my remarks today, I will provide you with a summary of testimony as recorded by the committee during the course of our study relative to dioxin and problems encountered by veterans in obtaining medical treatment for perceived herbicide related illnesses.

From the initial testimony, the Select Committee on Veterans Affairs learned that veterans of the Vietnam War had experienced health problems which they felt were linked to exposure to Agent Orange. Of those veterans examined at various VA medical centers, many reported suspected herbicide related illnesses including cancer, birth defective offspring, liver dysfunction and a number of other physical ailments and psychological disorders. Many veterans had fathered children both with birth defects such as spina bifida and hearing impairments. Other veterans testified they were victims of liver damage, kidney problems and delayed stress syndrome. Wives of Vietnam veterans also reported miscarriages and/or hystorectomies.

Another problem area was the location and the availability of medical records. sistance for veterans and their families. Instances of discourteous staff and lengthy waiting periods for medical care were mentioned. Other instances concern the dispensing of drugs imprudently, which veterans felt were ploys to keep them away from the VA medical centers for extended periods of time. The availability of medical services for children born with birth defects was a major concern, as many veterans testified they could not afford the medical treatment necessary.

Another problem area was the location and the availablity of medical records. Veterans told committee members they had tried repeatedly to locate their medical records, without success. Many felt these records would relate past medical history to some of the physical and mental problems they are experiencing today.

Research and laboratory tests to determine the real significance of herbicide and exposure of such to humans were perhaps areas of concern felt most needed by veterans. Many felt the psychological problems encountered were a direct result of tension and worry as to the effects of human exposure to potentially dangerous herbicides. They desire answers to questions that only scientific research and technology can answer. They believe with the scientific research laboratory facilities available and the commitment of sympathetic physicians, that these answers can be obtained and the psychological strain of not knowing the possible physical effects of Agent Orange to humans can be resolved.

Finally, veterans feel they are being ignored by their government. A more complete explanation from the government about the facts of the dioxin chemical is a major concern. The veterans want the government to fund research studies to deter-

mine the physical effect of herbicide exposure and to make these facts known. Although chloracne is the only related disorder scientifically proven, veterans believe the VA should be recognizing other health problems since many of the same symptoms have occurred in a sizeable number of Vietnam veterans.

From the committee's study of the disturbing allegations made with regard to the health hazards experienced by veterans of the Vietnam War as a result of their exposure to potentially dangerous herbicides and the difficulty in obtaining treatments from the VA, the Tennessee Select Committee on Veterans Affairs has determined the following recommendations:

RECOMMENDATION NO. 1

In recognition of the trust this nation holds in behalf of those who have served our country in time of war and in recognition of the heavy questions that eat at the minds of the many who have served, the committee recommends that initiated research efforts by the Veterans Administration, designed to find answers to the many questions surrounding dioxin and other herbicides, be continued to allow veterans this service of care and research at the hands of the federal government. Since the Veterans Administration is the government agency for services to our nation's veterans, it seems only appropriate that medical research and efforts to determine the significance of dioxin and Agent Orange be left to the sole control of the Veterans Administration. Through the VA, the veterans can see their government at work for them and they can identify with the people and the service.

RECOMMENDATION NO. 2

Vietnam veterans exposed to Agent Orange find themselves in the middle of a whirlpool of claims and counter claims. They have been told by dependable sources that dioxin contaminants found in Agent Orange are more deadly than the war itself. Other sources however maintain that the quantities of dioxin found in Agent Orange are not a threat to humans. Vietnam veterans in Tennessee and across the country are demanding scientifically valid answers from the scientific community and from the federal government. Therefore, the committee recommends to Congress that the budget for the Veterans Administration be fully funded to allow the VA to move in a more expeditious manner in research and laboratory testing relative to possible adverse health effects in those veterans exposed to potentially dangerous herbicides.

RECOMMENDATION NO. 3

Vietnam veterans exposed to Agent Orange have described a variety of symptoms to VA doctors. These symptoms include: chloracne, liver damage, loss of sex drive, cancer, birth defects in the children of exposed veterans and numbness or tingling in the extremities. The free Agent Orange physical examination being administered at the present time will serve as a method of spotting trends in the health status of Vietnam veterans and will be used in subsequent Agent Orange scientific inquiries. Therefore, we recommend that in this money appropriated by Congress, that the Agent Orange examinations being administered by the Veterans Administration be fully funded to allow these veterans an opportunity to seek medical service for conditions related to Agent Orange.

RECOMMENDATION NO. 4

Many Vietnam veterans who have sought assistance from the Veterans Administration in the past have been subjected to bureaucratic runarounds and indifferent or cynical staff members. Therefore we recommend that the Veterans Administration Medical Center's personnel be sensitive to the physical and psychological needs of veterans who claim exposure to Agent Orange and be emphathetic with these needs as veterans are examined, treated and counseled and work to establish more positive rapport with the veterans who seek such medical assistance.

In conclusion, the committee believes there must be a concerted and coordinated effort by the federal and state governments to maintain the quality of programs and services traditionally awarded to those who have borne the battle. We believe the Veterans Administration must take a more aggressive stance in addressing this issue of possible adverse health effects on American service personnel from Agent Orange or other herbicides in Vietnam.

We believe the state, through efforts of government committees and in cooperation with the Veterans Administration can listen to the many problems confronting our state's veterans and possibly offer veterans a more direct explanation of the

government's involvement in research and the programs and services now available for the purpose of medical care.

Finally, we believe, through these combined efforts of both the state and federal government, Tennessee and the United States can continue its commitment to those who served their country in time of war.

Thank you.

TENNESSEE
HOUSE OF REPRESENTATIVES

SELECT COMMITTEE

FOR THE

STUDY OF VETERANS AFFAIRS

PREPARED BY THE OFFICE OF LEGAL SERVICES
PURSUANT TO HOUSE RESOLUTION NO. 30 OF THE
NINETY-SECOND GENERAL ASSEMBLY OF THE
STATE OF TENNESSEE

SELECT COMMITTEE FOR THE STUDY OF VETERANS AFFAIRS

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CHAIRMAN
CONSERVATION AND ENVIRONMENT

MEMBER OF COMMITTEES
CALENDAR AND RULES
FINANCE, WAYS AND MEANS
VETERANS AFFAIRS

November 17, 1982

Members of the General Assembly
The Governor
State of Tennessee
Nashville, Tennessee

Fellow Lawmakers:

This study has been conducted by direction of the Ninety-second General Assembly and the recommendations herein represent the opinion of the majority of the members of the Select Committee for the Study of Veterans Affairs.

Much time has been devoted to collecting and studying information in regard to the health hazards experienced by veterans of the Vietnam War as a result of their exposure to potentially dangerous herbicides and the difficulty that these veterans have encountered in obtaining treatment for their conditions from the Veterans Administration.

The committee has endeavored to insure that this report is objective and non-partisan and it is our intention to forward these findings and recommendations to Congress.

Our appreciation is extended not only to the federal and state officials for their cooperation and assistance in the making of this report, but also to the veterans and individuals who extended their time and effort to make this report possible.

The committee hopes that this report will prove useful to you as you continue to represent those "special" people in your district and state known as veterans.

Respectfully submitted,

I. V. Hillis, Jr.
Chairman

HOUSE RESOLUTION NO. 30

by Hillis

A RESOLUTION to create a committee to study the problems confronting Veterans Affairs.

WHEREAS, at the directive of the Ninety-first General Assembly, the Select Committee on Veterans Affairs was created to examine the unique needs of Tennessee's 450,000 veterans; and

WHEREAS, as an initial part of its study, the committee conducted tours of each of the state's four veterans hospitals, where the members witnessed first-hand both the accomplishments and problems of the veterans medical care system; and

WHEREAS, upon examination of these four medical centers, the committee sent representatives to Washington to express the views of the General Assembly before the House Committee on Veterans Affairs; and

WHEREAS, because the state will be confronting a variety of new and complex problems as the number of elderly veterans expands, it would be prudent to examine these problems; now, therefore,

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE NINETY-SECOND GENERAL ASSEMBLY OF THE STATE OF TENNESSEE, That a seven member Select House Committee on Veterans Affairs be appointed by the Speaker of the House of Representatives and be continued for two years in order to study further the problems confronting Tennessee Veterans.

BE IT FURTHER RESOLVED, That the committee report its findings and recommendations to the Ninety-third General Assembly no later than January 1, 1983, at which time the committee shall cease to exist.

BE IT FURTHER RESOLVED, That all members of the committee shall remain members until the committee reports its findings to the Ninety-third General Assembly and shall be paid as members of the General Assembly are paid for attending committee meetings in accordance with the provisions of Tennessee Code Annotated, Section 3-1-106.

23-542 O - 83 - 7

PREFACE

At the directive of House Resolution 30, the Ninety-second General Assembly created the Select Committee for the Study of Veterans Affairs. The Committee chaired by Representative I.V. Hillis, Jr. was comprised of seven House members, each of whom had served in the nation's armed forces. Throughout the summer and fall of 1981, the Committee conducted a series of two-day hearings in Rogersville and in the Nashville/Donelson area. The agenda were designed to allow working veterans to meet with the Committee in the evenings, with the following mornings devoted to an open forum discussion for members of the press and those veterans that could attend.

Aware that most veterans programs lie within the administrative purview of the federal government, the Committee nonetheless felt it necessary to examine closely the concerns of Tennessee Vietnam veterans. The Committee learned that the problems encountered by the state's Vietnam veterans are of enormous magnitude and will demand a concerted and coordinated effort by the federal and state governments to maintain the quality of programs and services traditionally awarded to those who have "borne the battle." Working in close conjunction with the state Department of Veterans Affairs, the Committee hopes that this report will better inform the public and members of the General Assembly, thereby enhancing the opportunity for Tennessee to continue its commitment to those who served their country in time of war.

INTRODUCTION

The Select Committee for the study of Veterans Affairs was created by the General Assembly to study the problems of Tennessee veterans. In response to public concern and the controversy surrounding herbicides used in Vietnam, the committee decided to examine the issue and give Tennessee Vietnam veterans an opportunity to speak-out on past experiences and perceived present physical and psychological problems. The essence of the problem is the fact that veterans of the Vietnam War era are experiencing health problems they feel are a result of their exposure to potenially dangerous herbicides. Unfortunately, the federal government has no answer to the effects of Agent Orange, because at present there is no scientific evidence to link Agent Orange exposure to anything except a skin irritation called chloracne. Thus the question involves a moral obligation to care for our nations veterans, the enormous cost associated with veterans services and a determined effort by Congress to research phenoxy herbicides and their relation to long-term adverse health effects.

At the present time there are 169,000 Vietnam veterans who are residents of the state of Tennessee. Of those 169,000 approximately 109,000 are also veterans of the Korean War era. According to 1981 statistics made available by cooperation by the Veterans

Administration Medical Centers in Tennessee, there have been approximately 2,177 Vietnam veterans who have taken the Agent Orange examination in VA medical centers throughout the state. A breakdown of the examinations at the state medical centers can be seen below:

Location	Number of Veterans Examined
Mountain Home	460
Murfreesboro	48
Nashville	1,278
Memphis	391
Total	2,177

The information gathered from these examinations has been made a permanent part of the veterans record and the Veterans Administration Agent Orange Registry. This information can be used to support any future claim that might be filed and is correlated with those of other veterans in a search fom common problems.

At the request of the Committee, the Veterans Administration has made available a very informative Agent Orange film. The film was aired by several of the states public television stations in November 1981, to make the public more aware of what is being done about human exposure to herbicides. The Committee felt the film would bring more veterans to the medical centers for examinations and would inform the veteran of the services available if he believes he might have been susceptible to herbicide exposure in the Vietnam War.

FINDINGS

The problems experienced by veterans of the Vietnam War are many.

This unanimous evaluation by the committee was felt to be an important aspect of its report to the General Assembly. Although there is no scientific evidence to date linking Agent Orange exposure to long-term adverse health effects, except for a skin irritation known as chlor-acne, the committee heard numerous Vietnam veterans across the state testify that they believe "there is more to Agent Orange than meets the eye."

The comments in this report are not intended to imply that there are not serious problems confronting Tennessee's Vietnam veterans. As will be noted, most of these problems are not a result of administrative incompetency or a lack of compassion for veterans' needs by the Veterans Administration. They are simply the product of a steadily increasing demand for services on a government system that cannot offer answers when, at present, the answers do not exist. This report will examine briefly PROBLEMS recorded by the committee, the related POLICIES of the Tennessee Department of Veterans Affairs and the services made available to the veteran, and the veterans PRIORITIES regarding these problems.

Problems:

Health

From the initial testimony the committee learned that veterans of the Vietnam War have been experiencing health related problems which they feel are linked to exposure to Agent Orange. Of those veterans examined at VA medical centers, many have reported suspected herbicide related problems including cancer, birth defective offspring, liver dysfunction and a number of other physical and psychological disorders. A skin irritation characterized by skin lesions or chlor-acne is another problem. Veterans in both East and Middle Tennessee testified that they had fathered children born with birth defects such as spina bifida and children born with no sense of hearing. Others told the committee that they were victims of cancer, liver damage, kidney dysfunction and delayed stress syndrome. Many veterans also feel their wives are affected because of the number of miscarriages and/or hysterectomies that have resulted when the women became pregnant. A loss of weight problem and looking much older than their actual age are other concerns.

Medical Assistance

Another concern of the committee is the lack of medical assistance for veterans and their families. After hearing several complaints from the veterans in regard to the availability of medical attention for Agent Orange victims,

the veterans were advised to have a complete physical examination. Other related problems were brought to the attention of the committee including instances of discourteous staff at the veterans hospitals, the frustration of dealing with foreign physicians as well as intern positions and the lack of medical assistance available in treating birth defective children. The expense of obtaining proper care for these children is too much for the parents to bear alone and with no present medical assistance from the VA in this regard, the families simply cannot afford to give the children the treatments they need. The veterans also voiced their concern for obtaining medical assistance at the time it is needed without delay.

Lack of Adequate Information

With the technology, research and laboratory facilities available in the United States today, veterans cannot understand why tests to determine the "real" significance of Agent Orange or dioxin exposure to humans have not been conducted. Animals are the prime target for such examinations and experiments. Doctors admit, however, that different species react differently to chemical exposure and no direct correlation between animals and humans can be drawn. In simple terms, the veterans want to know if indeed Agent Orange exposure can cause medical problems, and if so, to what extent. With the research and laboratory facilities and the commitment of sympathetic physicians, veterans believe these answers can be obtained and the psychological strain of not knowing the physical effects to humans, can be resolved.

Medical Records

Medical Records and their whereabouts constitute the fifth problem area. Veterans testified that they have tried repeatedly without success to obtain their medical records. Many desire to see for themselves what kind of medication they were administered while in military service in an attempt to relate past medical treatments to some of the physical and mental problems they are experiencing today.

POLICIES OF THE VETERANS ADMINISTRATION
AND
THE TENNESSEE DEPARTMENT OF VETERANS AFFAIRS

As soon as the Veterans Administration became aware that an increasing number of veterans were worried about their exposure to the herbicide dioxin, they began to join efforts with medical science to research the problem. A review of medical literature on herbicides and other toxic chemicals was undertaken in a search for scientifically valid answers. From this research, the VA learned that Agent Orange was contaminated with minute quantities of the toxic chemical dioxin, or TCDD, Tetra Chlorol Dibenzol Dioxin. Dioxin is of concern because it has caused cancer, miscarriages and birth defects in laboratory animals exposed to it. Although a number of animal studies have been conducted, the VA does not yet know precisely how dioxin affects humans or the likelihood of veterans developing diseases as a result of exposure to dioxin in Vietnam. The only chemically related disease the VA does have scientific proof about is chlor-acne.

At present, there is no scientific evidence to suggest that a veteran exposed to Agent Orange is likely to incur sperm damage which might lead to the birth of a deformed child. Because of the concern relating to birth defects and miscarriages, a number of scientific studies are underway to explore this issue more fully.

The Veterans Administration is concerned with each individual's problem. The Veterans Administration currently is giving medical examinations to veterans who feel they may have been exposed to

Agent Orange. The results of the examinations are placed in the Veteran's Administrations' Agent Orange registry and become part of a veterans' permanent file for possible use in supporting any future claim. The data from the individual's examination is correlated with information from other veterans in a search for common problems.

POLICIES OF THE TENNESSEE DEPARTMENT OF VETERANS AFFAIRS

To assist the Tennessee veteran, the Tennessee Department of Veterans Affairs is available to collect information on the benefits and services that are available to veterans through the Veterans Administration. Likewise the department will inform veterans, their dependents and survivors, of the benefits and services that are available and assist the veteran or his dependent/survivor in the filing of the claim.

In the filing of the claim, the TDVA assists the veteran in the processing and prosecuting of the claim. The Veterans Administration subsequently follows up the claim for a possible link with military service. Compensation also may be available if the disability was incurred in, or was aggravated by military service. The only requirement is that the disability be confirmed by a medical examination and be related to the period during which the veteran served in the military. There is no requirement that a disability be linked to a specific cause such as Agent Orange.

Since service connected disability contemplates that an individual incurred a disability in service or aggravated a condition beyond its normal progress, or manifested a condition within a legal presumptive period (usually within one year following the period of service) Agent Orange carries with it no diagnoses. Therefore, mere exposure is not a disability under the meaning of the law.

VETERANS' PRIORITIES FOR ACTION

From the testimony received by the committee, veterans themselves believe the following issues are their primary concerns. They are listed in order of priority for the attention needed and the response desired.

Research

First, veterans have voiced as their main concern the need for free medical examinations for them, their spouses and their children. These tests should include chromosome examinations on potential parents, sperm tests on prospective fathers and other tests relative to human reproduction. Also, the proper test to detect dioxin in the bloodstream or fatty tissue of the body is felt to be important.

Facts From the Government

A more complete explanation from the government about the facts of the dioxin chemical is the second concern. The veterans want the government to initiate necessary legislation to determine the significance of herbicide exposure and to make these facts known. In an effort to end the controversy once and for all the veterans request that the government take the necessary measures to find out the problems linked to herbicides.

Medical Assistance for Health Problems

Although chlor-acne is the only herbicide related physical disorder scientifically proven, veterans believe the Veterans Administration should be recognizing other health problems since

many related symptoms have occured in a sizeable number of Vietnam veterans. They also want the Veterans Administration to offer assistance in the treatment of these problems, both physical and mental regardless of whether they are related to Agent Orange or not.

Medical Services Investigation

Finally, the veterans see a need for an investigation of the Veterans Administration Medical Centers by Congress. Some believe they have imprudently been administered drugs for their pain while others feel they are continuously issued prescriptions so they will stay away from the medical centers. Also, some veterans have acknowledged that they disapprove of foreign doctors conducting examinations and feel a need for a better quality of treatment. The promptness and courtesy of Veterans Administration staff employed at these medical centers is a related concern.

LEGISLATIVE ACTION OF OTHER STATES AND CONGRESS

In response to the perceived lack of clear policy from the federal government, several states have addressed the legacy of Vietnam, relative to veterans and their exposure to potentially dangerous herbicides.

Texas

The most recent state response to the Agent Orange controversy came from Texas, where on May 30, 1981 the Texas Legislature unanimously passed HB 2129. The law has four provisions for veterans who feel they are victims of Agent Orange exposure:

1. Requires the Texas Department of Health and the University of Texas Health Service Centers to provide veterans with fat tissue biopsies (used to determine the persistence of dioxin over long periods of time), genetic counseling, and genetic screening to determine if physical damage has resulted from exposure to herbicides or other causative agents including Agent Orange.

2. Requires physicians or hospitals having primary responsibility for treatment of Vietnam veterans who suspect herbicide exposure to submit a report at the request of the veteran to the state health department for evaluation and distribute an annual report to the legislature.

3. Authorizes the Department of Health to conduct epidemiological studies on Vietnam veterans who have cancer or other medical problems associated with herbicide exposure or who have children born with birth defects after the veteran suspected exposure to an herbicide or other causative agent; and

4. Authorizes the state attorney general to represent veterans on a class action suit for the release of medical records and information relating to herbicide exposure.

In the General Appropriations Bill, the Legislature allocated $200,000 to the Department of Public Health for 1982 and $300,000 for the fiscal year 1983.

New York

The first state to recognize the Agent Orange problem, New York passed legislation in the summer of 1980 to create a two year Commission on dioxin exposure. The Commission is composed of nine members: five Vietnam veterans, two union members, one from the business community and the New York Commissioner of Health.

The Commission's mandate is:

1. To identify veterans and others who have been exposed to dioxin;

2. To disseminate information about Agent Orange and other herbicides containing dioxin relative to health effects;

3. To hold public hearings on the problem of Agent Orange; and

4. To make recommendations to the General Assembly regarding the need for future legislative action.

The legislation also placed responsibility with the State Health Commissioner for maintaining a public information program on dioxin exposure, conducting an epidemiological study of health effects of dioxin exposure and initiating education and training programs for health professionals to assist them in the detection, diagnosis, and treatment of symptoms that may be associated with such exposure.

Pennsylvania

In September, 1981 the House Federal-State Relations Committee reported on HB 2943 which would create the Agent Orange Special Commission. The Commission would be responsible for:

1. Studying the effects of Agent Orange on Vietnam veterans in Pennsylvania;

2. Coordinating and assisting state and federal agencies in identifying victims; and

3. For seeking assistance for those afflicted by Agent Orange.

HB 2943 is currently pending before the full House.

Related bills such as the ones described above have also been introduced in California and Illinois. Lawsuits in other states have petitioned the courts to require a portion of the chemical manufacturers' profits be put in a trust fund for the victims of exposure. The manufacturers contend that the government ordered

the specifications, thus relieving them of any liability. The manufacturers also claim that when diluted properly, Agent Orange is safe.

Congressional Action

Under continuous pressure from veterans groups and the Veterans Administration, the Department of Defense and Congress have increased efforts to address the Agent Orange controversy. Under the provisions of the Veterans Health Programs Extension and Improvement Act of 1979 (P.L. 96-151) the Veterans Administration has awarded $114,288 to the UCLA School of Public Health to design a protocol for the congressionally mandated study of the effects of Agent Orange and other phenoxy herbicides on Vietnam veterans.

On June 16, 1981 the U.S. Senate voted 98-0 to approve treatment as part of the $232 million authorization for Veterans Administration programs. The Senate bill also provides medical care for veterans exposed to radiation during nuclear weapons tests in the 1940's and 1950's. Similar legislation passed by the House on June 2, 1981 provides aid for exposure to other defoliants as well. The House bill provides medical care for Vietnam veterans exposed to herbicides, including Agent Orange, extends the Vietnam veterans readjustment counseling program for three additional years and expands the Veterans Administration's herbicide study to include the effects of other service related environmental hazards.

The Air Force is also moving ahead with a long-term study designed to show if any of the 1200 operation "Ranch Hand" personnel - servicemen who operated the C-123 aircraft which sprayed Agent Orange in Vietnam have suffered ill effects from herbicide exposure.

23-542 O - 83 - 8

MEDICAL PROFESSIONALS ADDRESS THE DIOXIN CHEMICAL

Dr. Donald Cameron - Toxicologist and Animal Physiologist

As a toxicologist and animal physiologist at the University of Tennessee Medical Research Laboratory in Oak Ridge, Dr. Donald Cameron informed the committee that dioxin was indeed one of the most toxic chemicals prepared by man. From his research, he has discovered that approximately 200 pounds of the chemical was sprayed over the dense jungles of South Vietnam from 1966 to 1969. He estimated that one lethal dose of the chemical could take a person's life.

As for the physical effects, there is known evidence that dioxin is stored in the fatty tissue of the body and in the liver. With chloracne being the only visible symptom, tests in laboratory animals show liver dysfunction and nervous system disorder. The toxicity of the animals' response to the chemical is consistent with the symptoms seen in humans. Research indicates that the chance for cancer is much higher in those exposed to dioxin than in the general population. According to laboratory tests, dioxin is 20,000 times more toxic than hydrocyanic acid, an extremely toxic substance from which cyanide can be derived.

Dioxin itself is teratogenic, causing severe deformation of fetuses in animal research and known to be transmitted to developing

fetuses through the mother. At the present time there is no scientific evidence in animals that show direct relation by transmission of the father's sperm.

As for the mutagenicity, very limited data is available. One study, however, shows where mutagenic effects and their transmission to succeeding generations were studied and found to be controversial. Evidence of the study does show that dioxin does concentrate in the testes of the male and does affect the production of sperm. Also, instances of the transmission of the reduction in fertility in succeeding generations was present in the animals.

Dr. Cameron concluded that dioxin has been found in both Vietnam war veterans and non-Vietnam war veterans, in veterans, as such, and people who have never served in the military. The test to determine the minute quanity of dioxin is a bio-chemical exam that measures parts per trillion and can only be administered at special facilities of which only two such laboratories exist.

Dr. Hutchinson - Tennessee Department of Public Health

Speaking with reference to chemicals in general, Dr. Hutchinson informed the committee on the long incubation period between direct exposure and later physical effects. He said that medical science could not detect long-term effects since the close response of such chemicals was the relevant factor. Through some research and fact-finding Dr. Hutchinson has discovered that dioxin exposure in animal research produced evidence that the chemical caused cancer and birth defects. In a laboratory test of mice when exposed to

dioxin, female mice produced birth defective offspring. However, when male mice were exposed, no related birth defects, as such occurred.

In conclusion, he made reference to Congressional action to provide for the necessary research as to the effect that dioxin exposure has on humans.

Dr. Michael Kimberly - Tennessee Department of Public Health

While considering legislative action similar to that enacted by the Texas legislature in 1981, the committee called on the Tennessee Department of Public Health to analyze and study the merits and problems associated with the Agent Orange Research Legislation.

According to Dr. Kimberly, the law in Texas would provide for a "totally controlled research project" that would involve individual fat tissue biopsies, genetic screening and counseling, epidemiological studies on veterans who have medical problems associated with herbicide exposure or those who have children born with birth defects after the veteran suspected exposure to a herbicide or other causative agent.

With the lack of adequate facilities to conduct such test, the state would be spending money to contract out the study or portions of the study and the results would be just that - results since the Veterans Administration would be the final investigator and would be the ones to award the benefits as a result of their findings.

In conclusion, the department felt that the controlled study would require much money and that the Department of Public Health

did not have the necessary facilities and staff available to conduct such research. It was also decided, that once the testing was complete the veterans would still be without answers.

During the course of Dr. Kimberly's testimony and the committees discussion of the Texas bill, the Veterans Administration elaborated on the protocol being developed by the University of California Los Angeles for the Veterans Administration and the contract to be awarded to a medical facility designed for such testing once the protocol had been established.

After analyzing the situation at hand and the possibility of enacting similar legislation for Tennessee veterans, the committee then decided that the money was not available to contract out the necessary staff and facilities for accurate testing and the tests would be a duplication of the VA's controlled study.

RECOMMENDATIONS

On January 20, 1982 the committee met in Nashville to discuss recommendations to Congress. After considerable discussion the committee adopted three motions.

Recommendation No. 1

Vietnam veterans exposed to Agent Orange find themselves in the middle of a whirlpool of claims and counter claims. They have been told by dependable sources that dioxin contaminants found in Agent Orange are more deadly than the war itself. Other sources however maintain that the quantities of dioxin found in Agent Orange are not a threat to humans. Vietnam veterans in Tennessee and across the country are demanding scientifically valid answers from the scientific community and from the federal government. Therefore, the committee recommends to Congress that the budget for the Veterans Administration be fully funded to allow the VA to move in a more expeditious manner in research and laboratory testing relative to possible adverse health effects in those veterans exposed to potentially dangerous herbicides.

Recommendation No. 2

Vietnam veterans exposed to Agent Orange have described a variety of symptoms to VA doctors. These symptoms include:

chloracne, liver damage, loss of sex drive, cancer, birth defects in the children of exposed veterans and numbness or tingling in the extremities. The free Agent Orange physical examination being administered at the present time will serve as a method of spoting trends in the health status of Vietnam veterans and will be used in subsequent Agent Orange scientific inquiries. Therefore, we recommend that in this money appropriated by Congress, that the Agent Orange examinations being administered by the Veterans Administration be fully funded to allow these veterans an opportunity to seek medical service for conditions related to Agent Orange.

Recommendation No. 3

Many Vietnam veterans who have sought assistance from the Veterans Administration in the past have been subjected to bureaucratic runarounds and indifferent or cynical staff members. Therefore we recommend that the Veterans Administration Medical Center's personnel be sensitive to the physical and psychological needs of veterans who claim exposure to Agent Orange and be emphathetic with these needs as veterans are examined, treated and counseled and work to establish more positive repport with the veterans who seek such medical assistance.

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
ROGER D. BINGHAM	P.O. Box 1316 LaFollette, TN	562-9365		Nerves, Clor-Acne, knots, depression, rash, memory loss, numbness, fatigue, shortness of breath.
LONNIE LAWSON	Rt. 3 Box 328 LaFollette, TN	562-0222		Backache, mouth sores, knots on arms, numbness.
DAVID E. SHEPPARD	500 E. Main Rogersville, TN	272-4684		Backache, lung disease-oper., ear disease-oper., pain in neck and shoulders, headaches and dizziness, bleeding from rectom, insomnia, skin rash, 20% disability.
MR. & MRS. DAVID KIRBY	7213 Dogwood Road Knoxville, TN	691-8613		
MR. & MRS. LEONARD B. FRAZIER	4250 Rock Rose Circle Kingsport, TN 37664	288-4346		Achalasi, inoperative, left lung, restricted breathing, non-motility of esophagus, rash, depression and nerves, thickening of left lung.
JAMES EDWARD ARMSTRONG	Route 8, Box 389 Church Hill, TN 37642	357-6392		Rash on arm, pain in joints, (high temp.) stiffness in hand and ankles.
RON LUMPKIN	105 Edinboro Lane Oak Ridge, TN 37830	483-4349		Stress symptoms.
WILLIAM STUCKEY	Rt. 13, Norris Ln. Knoxville, TN	922-2236		Pain in back and leg, nerves, numbness in legs and arms,
DONALD STEADMAN	Rt. 1 Fall Branch, TN	348-7993		Pain in joints, rash on shoulders and back and depression.
JERRY LANE	Kingsport, TN	246-3989		Stomach, tumors, numbness and rash.
JERRY REYNOLD	Kingsport, TN	245-5635		Rash, nerves.

Page Two

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
ROY MULLINS	Kingsport, TN	239-5023		Headaches, pain in neck, shoulder, nerves and other..
ED FAHRNEY	335 Hale Avenue Morristown, TN	586-1345		
EARL J. BECK	Rt. 2 Whitesburg, TN			Depression, nerves, insomnia, aching joints.
R. STUFFLE, JR.	Rt. 2 Mooresburg, TN	272-2347		Swelling hands and feet, stomach and chest pains (continuous), dizziness, feet irritation, stiffness of joints..mainly in hands.
DANNY E. SOUTHERLAND	Rt. 1, Box W51A Chuckey, TN 37641	257-2242		Headaches, back and nerves.
JIMMY R. EARLEY	Rt. 2, Box 41 Chuckey, TN 37641	257-6376		Nerves, leg brace.
HUBERT NEAL	Rt. 2 Surgoinsville, TN	345-2616		
HERMAN GREER	Rt. #1 Surgoinsville, TN	345-3669		Nervous rash.
KENNETH HORNE	Rt. 2 Rogersville, TN	345-2232		None
WAYNE RHOTEN	Rt. 8 Surgoinsville, TN	345-2855		Nerves.
JAMES W. HARRELL	Rt. 8 Church Hill, TN	357-3574		Depression, nervousness, rash.

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
GARNIE E. BOYD	Box 533 Church Hill, TN	357-6909		Nervousness, depression, weakness.
W.J. FAILLW	Rt. 4 Box 268 Rogersville, TN	272-9302		Unknown
ALFORD G. MAXEY	Sneedville, TN	None		Unknown
RALPH ROLEN	Rogersville, TN	272-6574		
ROGER D. FROST	Church Hill, TN	245-0028		Skin rash, nerves, eyes, aching joints.
ROBERT H. FROST	Church Hill, TN	245-5398		
LLOYD H. JAFFRIES	Rt. 2 Moshiem, TN	422-7415		
SAMMY LIPE	Box 212 Rogerville, TN	272-3583		Headaches, cramps, nerves.
JAMES L. BULLOCK	Rt. 2 Box 81 Hampton, TN	725-3779		Severe headaches, loss of sight, numbness of legs and arms and back pain.
DOYLE J. CASTLE	282 Alafome St.	288-2991		Headaches, nerves, aches and pains. Swelling and tumors.
HUNLEY GULLEY	Rt. 1 Bulls Gap, TN	235-6347		Disease of the feet and weight loss.

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
RON KEIRSEY	Rt. 2 Rogersville, TN	345-2545		Allergies
CHARLIE Gilley	Rt. 2 Bulls Gap, TN	235-6347		
DAVID GATES	225 Alan Ave. Knoxville, TN	523-1713		Blackouts, nervousness.
SAMMY HUGHES	Morristown, TN			Nervousness.
J.E. HAMBLEN	3661 Glen Alpine Kingsport, TN	349-6495		Birth defect.
ROGER BURLESON	Rt. Chuckey, TN	257-5380		Rash
Ex-Sgt. JERRY LEE	2607 Patrick Ave. Maryville, TN	984-2153		Birth defects, chronic headaches, eye damage, nausea and rash.
LARRY GLADSON	Rt. 4 Rogersville, TN	272-8353		Joints sore, nervousness, pain in lungs.
ANDREW TOLLEY	5700 Cochise Trail Kingsport, TN	323-3349		Joints sore, pressure in chest and headaches.
LARRY HORNE	1232 Jarvis Rogersville, TN	272-9903		
JIMMIE L. DABBS	Rt. 2 Church Hill, TN	357-4458		Leukemia and rash.

Page Five

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
KENNETH D. LANE	2121 Stadium Dr.	245-7680		
GENE W. ORFIELD	Rt. 8 Church Hill, TN	357-7975		
FLOYD		933-6892		
THOMAS A. LLOYD	Rt. 4 Church Hill, TN	357-4722		
LLOYD E. BYRD	West Hills	272-6174		
DONOVEN THOMAS	2405 Jersey Ave. Knoxville, TN	523-4612		
RICHARD RAMSEY	3900 Knott Ave. Knoxville, TN	522-3321		
JAMES K. WHITE	406 Cedarcrest Dr. Kingsport, TN	239-5519		
BOB CONNELLY	133 Hiwassee Dr. Mt. Carmel, TN	357-3647		
DAVID McDOWELL	Rt. 2 Rogersville, TN	357-3647		
ROBERT MASTERSON	Rt. 8 Knoxville, TN	933-6181		

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

Page Six

NAME	ADDRESS	PHONE		SYMPTOMS
ELLIS J. COGGINS	Rt. 1 Rogersville, TN	272-9697		
BOB RHEA	409 Onoli Dr. Greenville, TN	639-3743		Birth defect (child born with holes in heart)... Nerves.
DANIEL W. CRADDOCK	Rt. 2 Church Hill, TN	357-3004		Headache, back and stiffness of all joints. Sun light - sex desire - skin irritation - blurred vision.
DONALD L. LAWSON	Rt. 1 Rogersville, TN	272-3912		None known.
JIM BRANHAM	Rt. 1 Box 98H Fidson, TN	944-3108		Joint pain, small bones in hands and feet.
BILL KENNEDY	115 Manlon Dr. Kingsport, TN	239-7416		Skin disease and arthritis.
JERRY D. LEE	518 Brummit Rogersville, TN	272-4321		Joints...nerves.
TOM PETERS	P.O. Box 387 Church Hill, TN			None known.
HAROLD W. LEONARD	Rt. 3 Rogersville, TN	272-3831		None known.
ELDRIDGE McPEAK	Rt. 8 Church Hill, TN	357-4380		None known.
DENNIS G. CHAPMAN	1222 Robin Hood Dr. Greeneville, TN	638-7660		Two daughters.. heart disease...severe.

Page Seven

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
BOBBY BAILEY	Route #2 Church Hill, TN	357-6291		Backache, joint, rash
CLAY WINSTOCK	Rt. 1 Mooresburg, TN	272-9997		Sore joints, breathing, nervousness.
HUBERT ARWOOD	Greeneville, TN	639-6443		Nerves, sore joints, sexual disorder.
FREDDIE KIRBY	Greeneville, TN	639-8739		Body rash.
LAWRENCE H. ANDERSON	1222 Sevierville Pk. Maryville, TN	984-9392		Stomach, kidney, depression, memory and other problems. Ulcers and headaches.
JOHN E. FORD	Rt. 1 Moshiem, TN	422-4132		Stomach and colon disorder, stiffness of joints and nerves.
BUDDY PRENELL	Kingsport, TN	245-4064		Headaches, stomach pains, boils, swelling and stiff joints.
JAMES GREENE	Sneedville, TN	733-4559		Pain in arms and legs.
ROGER COMPTON	208 Reece St. Kingsport, TN	349-6202		Skin rashes, nerves, stomach pains, stiffness in knee.
STEVE TALLENT	2301 Boxwood Ln. Knoxville, TN	521-7964		Skin rash, loss of portion of lung, depresseion, stiff joints, outrages, nerves and stomach problems.
J. C. WILDER	Box 110 Rogersville, TN	235-5680		Back hurts, stomach and joint stiffness.

VETERANS EXPOSED TO AGENT ORANGE

Rogersville, TN July 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
ISHAM KING	811 College St. Knoxville, TN	522-1861		Nerve damage, skin rash, boils and headaches.

VETERANS EXPOSED TO AGENT ORANGE August 9, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
ROY LOUGH	506 Kentucky St. LaFollette, TN	562-4220		1 Miscarriage 3 Birth defected children
CHARLES RAMSEY	Knoxville, TN	687-1700		Child with birth defects.
JIM SUDRELS	Lot D7 Roberts Rd.	933-0520		2 Children - classic symptoms.
JOHN E. FORD	Rt. 1 Mosheim, TN	422-4132		Birth defects in only child.
JERRY D. LEE	518 Brummitt St. Rogersville, TN	272-4321		Birth defect in child.
(Vet.'s wife) MRS. BRENDA BISHOP	Rt. 3, Box 166 Rogersville, TN	272-8967		Daughter has Scoliosis.
JIM BEELER	3109 Topper Kingsport, TN	288-5031		Child born pre-mature (open spine).
CHARLIE M. GRUBB	Rt. 2, Box 201 Bulls Gap, TN	235-6359		Children with birth defects.
LEROY H. DAVIS	Rt. 7 Rogersville, TN	235-2585		Rash in children.
DENNIS G. CHAPMAN	1222 Robin Hood Rd Greeneville, TN	638-7660		Two daughters with severe congenital heart disease.
J.E. HAMBLEN	3661 Glen Alpine Kingsport, TN	349-6495		Child with birth defect.

VETERANS EXPOSED TO AGENT ORANGE

November 19, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
DAN W. JACKSON	400 E. Broadway Rogersville, TN	272-9876 272-4392		Rash, insomnia, boils, sensitivity to light.
FRED VINCENT	Lake City, TN 113 Hill Street	426-2640		Blackouts, nervous condition, rash and tumors.
GARY BURNETTE	2608 Dexter Lane Knoxville, TN	573-0824		Muscles, nervous, rash, headaches, dizziness, thyroid and gout.
SHARON WENTZ	1812 W. Atlantic Springfield, MO	417-865-3628		Widow
JOHN SMITHERMAN	Rt. 1 Box 59 Mulberry, TN	433-8564		Radiation exposure..disabled.

23-542 O - 83 - 9

VETERANS EXPOSED TO AGENT ORANGE

December 16, 1981

NAME	ADDRESS	PHONE		SYMPTOMS
DAN JACKSON	400 Broadway Rogersville, TN	272-4392		
DAVID E. SHEPPARD	122 McKinney Rogersville, TN	272-3773		
WAYNE GILES	3223 Washington Pk. Knoxville, TN	524-8503		
CARL SMITH, JR.	Rt. 8 Box 170 Maryville, TN	982-0381		
JERRY LEE	2607 Patrick Ave. Maryville, TN	984-2153		
RAYMOND E. BIRMINGHAM	Rt. 1 Box 248 Iron City, TN	615-724-4737		
FRED VINSANT	400 Broadway Rogersville, TN	272-4392		
STEVE TALLENT	2301 Boxwood Lane Knoxville, TN	521-7964		
SHARON WENTZ	1812 W. Atlantic Springfield, MO	417-865-3628		
BILL AYERS	Rt. 12 Sunnyside Dr. Murfreesboro, TN			
Mrs. Danny Shinpaugh				

APPENDIX "B" & "C"

ATOMIC VETERANS

The Case of Mr. John Smitherman

In an effort to assist Mr. John Smitherman in his fight for disability benefits from the Veterans Administration, the Ninety-second General Assembly passed House Resolution No. 131. The resolution urges the Veterans Administration Board of Appeals to give special consideration to Mr. Smitherman, relative to disability benefits for physical problems believed to have been caused from exposure to radiation.

The Select Committee for the Study of Veterans Affairs continues to support Mr. Smitherman in such fight and further urges the federal government to give him that special consideration that he so deserves.

HOUSE RESOLUTION 131

A RESOLUTION to urge the Veterans Administration Board of Appeals to give special consideration to Mr. John Smitherman, relative to disability benefits for physical problems caused by radiation exposure.

WHEREAS, Mr. John Smitherman of Mulberry, began a fight for disability benefits in 1976 and since that time he has been denied compensation on five separate occasions by the Veterans Administration Board of Veterans Appeals; and

WHEREAS, stationed on the USS Allen M. Sumner during two nuclear test blasts on Bikini Atoll in the Marshall Islands in 1946, Mr. Smitherman and a host of physicians have testified that radiation exposure has caused his physical problems; and

WHEREAS, as a result of what doctors diagnosed as a kidney ailment, Mr. Smitherman received a medical discharge from the navy in August, 1947 and later incurred even more health problems; and

WHEREAS, following a deterioration of the lymphatic system, Mr. Smitherman has had both legs amputated and doctors have suggested that his left hand and part of his arm also be removed; and

WHEREAS, the Veterans Administration continues to treat Mr. Smitherman, but the Board of Veterans Appeals does not recognize his condition as service connected; and

WHEREAS, although the board agreed in August, 1981 that Mr. Smitherman had been exposed to low levels of radiation while on the Bikini Atoll, they maintained that the amount was not enough to cause his condition; and

WHEREAS, their decision stated that Mr. Smitherman "had not been exposed to such high levels of radiation, and his exposure to low-level radiation had not been linked by ongoing research to arterial or lymphatic obstructive diseases"; and

WHEREAS, service connected disability contemplates that an individual incurred a disability in service or aggravated a condition beyond its normal progress, or manifested a condition within a legal presumptive period (usually within one year following the period of service); and

WHEREAS, Mr. Smitherman had been the picture of perfect health when he enlisted in the armed forces, and following his exposure to gamma nuclear radiation, his health began to deteriorate and he experienced many health problems; and

WHEREAS, both the state and federal governments have a moral obligation and a long standing commitment to provide disability benefits to those men and women who served our country in time of war; and

WHEREAS, the elected representatives of Tennessee join Mr. Smitherman in his fight for disability benefits as a result of his exposure to nuclear radiation; now, therefore,

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE NINETY-SECOND GENERAL ASSEMBLY OF THE STATE OF TENNESSEE, That we hereby urge the Veterans Administration Board of Appeals to give special consideration to Mr. John Smitherman, relative to disability benefits for physical problems caused by radiation exposure.

BE IT FURTHER RESOLVED, That we urge the board to respond quickly to Mr. Smitherman's appeal and consider him for the compensation he so deserves.

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to Mr. John Smitherman, Mulberry, Tennessee, and to each member of the Veterans Administration Board of Appeals, Washington, D.C. 20420, and to each member of the Tennessee Congressional Delegation, Washington, D.C. 20515.

STATEMENT BY BART KULL, SPECIAL ASSISTANT TO THE ACTING DEPUTY UNDER SECRETARY FOR INTERGOVERNMENTAL AFFAIRS, DEPARTMENT OF HEALTH AND HUMAN SERVICES AND ASSISTANT TO THE ACTING CHAIRPERSON, AGENT ORANGE WORKING GROUP OF THE CABINET COUNCIL ON HUMAN RESOURCES

Mr. Chairman and members of the subcommittee, I am Bart Kull, Special Assistant to the Acting Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services. I am also assistant to the Acting Chairperson of the Agent Orange Working Group of the Cabinet Council on Human Resources.

I am pleased to appear before this Subcommittee to report on the activities of the Agent Orange Working Group.

With me is Dr. Carl Keller, Senior Epidemiologist with the National Institute of Environmental Health Sciences of the National Institutes of Health; and Chairman Pro-Tem of the Agent Orange Working Group's Science Panel.

Dr. Keller, a long-term member of the Working Group's Science Panel is serving as Chairman Pro-Tem of the Panel to insure the uninterrupted flow of activities by the panel until a permanent chairperson is designated.

The former Chairman of the Science Panel, Dr. Vernon Houk, Director of the Center for Environmental Health of the Centers for Disease Control, has stepped down from the chairmanship. Although he remains an important member of the Science Panel, he proposed and it was agreed that with the recent transfer of responsibility for the conduct of the VA Epidemiology Study to the Centers for Disease Control it would not be appropriate for him to remain as Chairman because of the review responsibilities of the Science Panel and the major role taken in such reviews by the Chairperson of that panel.

I understand that this committee is mainly interested in the status of various human research studies currently underway or in the planning stages.

Representatives of the various agencies involved in this research are present to provide reports on studies under their purvue. I will limit my remarks to an overview of those considerable research efforts.

Since my appearance here on September 15th of last year, the VA has agreed by interagency agreement signed January 13th and 14th that CDC be provided the resources and authority for the design, implementation, analysis and scientific interpretation of the Epidemiology Study mandated by Congress under Section 307 of Public Law 96-151, as amended.

The Office of Management and Budget has approved the hiring of personnel by CDC for fiscal year 1983 for these purposes. The preparation of a protocol for the study is well underway.

Data collection for the CDC Birth Defects Study will be completed by the end of this year with preliminary analysis expected shortly thereafter. The representative from CDC will provide the committee with much greater detail on these topics.

Similarly, the CDC/NIOSH Dioxin Registry of U.S. Production Workers is proceeding on schedule.

The establishment and maintenance of an International Registry of similar workers in other countries appears feasible.

The National Institute of Environmental Health Sciences will meet with the principal investigator from the International Agency for Research on Cancer, as well as a scientific advisory group, on May 20th. The purpose of the meeting will be to decide whether to begin work on development of the actual international registry and of a protocol for an epidemiology study derived from cohorts obtained from the registry. It is anticipated this will be approved. This registry will be compatible with the NIOSH Dioxin Registry, thus improving the numerical power of mortality and other data.

The National Cancer Institute is conducting a case control study of lymphoma and soft tissue sarcoma to test the association between the use of herbicides and the incidence of lymphoma and soft tissue sarcoma among agricultural applicators in Kansas. The interview phase of this study is 50 percent complete and should be 100 percent complete by the end of September with final results expected by the spring of next year.

Additional studies are being conducted in the States of Minnesota and Iowa where insecticides are generally applied simultaneously with herbicides to corn and other crops. A similar case control design is being employed in these areas to compare pesticide exposures in general among cases of leukemia and lymphoma and suitable controls. Although information will be obtained on herbicide use, we may not be able to separate possible effects of exposure to herbicides alone from those exposed to herbicides and other pesticides. Results of these studies should be available in late 1984.

The Veterans Administration is engaged in a number of studies on Agent Orange exposure and the Vietnam experience. For instance a mortality study is well underway to analyze and compare death rates and cause-of-death between veterans with service in Vietnam and comparable veterans who did not serve there. Also, VA is planning a study of Identical Twins in which one twin served in Vietnam and the other did not. VA expects to have its protocol completed, including peer review, by October. As you know, the VA is engaged in other registry and research work, including the Agent Orange Registry and dioxin-in-fat-tissue studies. The representative from the Veterans Administration will elaborate on these topics shortly.

The mortality data from the Air Force Ranch Hand Study will be released soon. Data should be available for public release after review by the advisory committee next month. It will be followed with morbidity data later this year. Air Force General Murphy Chesney will be providing detailed testimony on this today.

Finally, following the recent department of James Stockdale, Chairman of the Agent Orange Working Group, Kae Rairdin has been appointed Acting Deputy Under Secretary for Intergovernmental Affairs and Acting Chairperson of the Working Group.

Secretary Heckler is seeking a permanent replacement to fill these important positions. Having served with Mrs. Heckler on this committee, you know, I am sure, of her genuine and long-standing concern about this issue and the fact that as a member of the Cabinet, she considers it to be a high priority.

In the meantime, research, the oversight of research, contacts with members of Congress, the public, and the veterans groups and the general flow of information has continued on an uninterrupted basis.

I appreciate the opportunity to provide this introduction and would be happy to respond to any questions.

TESTIMONY BY DR. VERNON N. HOUK, DIRECTOR, CENTER FOR ENVIRONMENTAL HEALTH, CENTERS FOR DISEASE CONTROL, PUBLIC HEALTH SERVICE, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Mr. Chairman and members of the Subcommittee, I am Dr. Vernon N. Houk, Director, Center for Environmental Health (CEH), Centers for Disease Control (CDC), Atlanta, Georgia. I am accompanied by Dr. J. David Erickson, Director of CEH's Agent Orange Projects and Dr. William E. Halperin, Chief of the Industrywide Studies Branch, the Division of Surveillance, Hazard Evaluation and Field Studies, National Institute for Occupational Safety and Health (NIOSH), CDC.

I am pleased to be here this morning in response to your request for testimony regarding the plans for the Centers for Disease Control's conduct of the epidemiological study mandated by Public Law 96-151 as amended, regarding Agent Orange and the work CDC's NIOSH has done in evaluating the health of workers who may have been exposed to dioxin, the major toxic contaminent of Agent Orange.

I appeared before this Subcommittee as Chair, Science Panel, Agent Orange Working Group on September 15 of last year. Since the matter of CDC's involvement in the epidemiology study was mentioned at those hearings, CDC began consideration of the issue well before the Administrator of Veterans Affairs asked HHS to consider this possibility. CDC had determined as early as the first week of October that, if called upon and provided with appropriate resources, it could design and conduct a scientifically sound study. On October 22, the HHS Assistant Secretary for Health, Dr. Edward N. Brandt, met with the VA's Medical Director, Dr. Custis, to begin discussions about transferring responsibility for the study to CDC.

On October 27 I asked Dr. Paul Wiesner, Director of the Chronic Diseases Division and also Assistant Director for Medical Affairs of the Center for Environmental Health, to assign staff and resources to start work on development of a scientifically acceptable protocol outline along the lines of other epidemiological investigations conducted over the years at CDC. Dr. J. David Erickson agreed to chair a task group of experienced medical epidemiologists and biostatisticians from among CDC staff. They were aided by a VA senior staff person loaned to us to give the CDC group first hand information about the VA's previous work in this area. The task group held its first meeting on November 1, 1982. During the first few days of November its members traveled to several cities to meet on the subject with the Army, Air Force, and National Institutes of Health personnel, and with developers of the UCLA proposed protocol which had previously been submitted to the VA.

I must say that I am proud of the energetic manner in which our scientific team attacked the task of developing a protocol outline. By November 8, the CDC task group was meeting daily working to complete the protocol outline, which was sub-

mitted by Dr. Brandt to the Veterans Administration on December 6. The outline we proposed included two separate but related investigations: one to evaluate the possible long-term health effects of exposure of U.S. ground forces to Agent Orange; the other to make an assessment of the possible health effects of service in Vietnam. The protocol outline calls for the participation of 30,000 veterans, comprising five cohorts—or groups—of 6,000 each. Three of these five cohorts will provide data for the "Agent Orange" study and the three cohorts will be made up as follows: one cohort of veterans who served in areas of Vietnam where herbicides were used and who were likely exposed; a second cohort of veterans who, though serving in areas of Vietnam where herbicides were used, were unlikely to have exposed; and a third cohort of veterans who served in areas of Vietnam where herbicides were not used. Data from the fourth and fifth cohorts will be used in the other investigation of the possible health effects of the "Vietnam Experience". Of the two cohorts in this related study one will comprise Vietnam-era veterans who served in Vietnam; the other will be made up of veterans who served during the same years, but in other parts of the world.

Each of us two concurrent studies will have three major components. First, a mortality assessment to determine which veterans may have died since being discharged and the cause of the death; second, a health interview and; third, a comprehensive medical examination and laboratory assessment. This third component—the examination and laboratory work—will be provided to 2000 men from each of the five cohorts. Although both of the concurrent studies will have several other features in common, the sampling plan, timetables, and some of the health outcomes measured in the interview and medical examinations will differ between the two studies. They are designed to answer related but different questions of importance to Vietnam veterans and their families.

Because of the particular concern that Vietnam veterans may be at increased risk for contracting certain cancers, particularly soft tissue sarcomas, we have since proposed an additional study of this problem and its relationship if any, to service in Vietnam. This addition has been approved by the Assistant Secretary for Health as a critical third element of the CDC Agent Orange Epidemiology Study and has been recommended by PHS to the VA for funding.

The choice of veterans for inclusion in the various study cohorts will derive from review of military records from the Vietnam era. Considerable work with records from Vietnam has already been done in consultation and cooperation with the Department of Defense (primarily staff of the Army Agent Orange Task Force) and the White House Agent Orange Working Group. CDC has assigned a staff member to work full time with the Army Agent Orange Task Force. We continue to be pleased with the energetic and dedicated work of the Army Agent Orange Task Force under the able leadership of Mr. Dick Christian.

In approving the Interagency Agreement with the Public Health Service on January 13, the VA accepted the Agent Orange Exposure, as well as service in Vietnam studies concept, and committed to provide $3 million to CDC and to initiate action to obtain OMB approval for 28 full-time staff positions during fiscal year 1983 for the beginning phases of the studies, including the development of a complete research protocol. Since early November a small Agent Orange Projects staff within the Center for Environmental Health has been preparing for the planned studies. We are now in the process of recruiting the appropriately qualified professional and support staffs for the continuing formative and implementation phases of the studies. CDC is scheduled to have complete protocols, including one for our proposed soft tissue sarcoma and lymphoma case-control study, ready for peer review and necessary policy and budget clearances by the end of May 1983.

In late January and early February, 1983, Drs. Wiesner and Erickson called several of the largest veterans' organizations to seek their advice and to describe the investigations we intend to pursue. During this same time, they also met with staff members of the House and Senate Committees on Veterans' Affairs. In addition, on May 2 Drs. Wiesner and Erickson held an update briefing for representatives of about 15 veterans' organizations.

As required by Public Law 96-151, the CDC protocol outline has been reviewed by the Office of Technology Assessment of the Congress. During the first week of March, Mr. Chairman, you and other Congressional leaders should have received OTA's favorable report on the protocol outline. OTA Director John Gibbons' covering letter notes the concurrence of the OTA Agent Orange Review Advisory Panel with the proposed studies as outlined by CDC and states that, "The two studies together address the questions of greatest concern to veterans and their families: What, if any, are the health effects of 1) exposure to agent Orange, and 2) service in Vietnam, which may have included exposure to Agent Orange, other chemicals,

drugs, and other factors in an exotic environment?" OTA has only one serious reservation with CDC's plan. OTA feels that our proposed timetable, which calls for completion of our studies at the end of 1987 is rather optimistic. I agree. But CDC will make every effort to meet that timetable.

On April 19, the HHS Assistant Secretary for Health, Dr. Edward N. Brandt, Jr., at the request of VA and OMB, submitted to the VA a budget estimate and justification for the CDC-recommended Agent Orange and Vietnam Experience epidemiological studies. Resources for the activity will be appropriately sought through the Veterans Administration appropriation. This budget proposal estimates expenditures and staffing needs during Fiscal Years 1984–87.

The VA has agreed to review and submit expeditiously our budget proposal to the Office of Management and Budget to ensure that the fiscal year 1984 budget is amended to include specific funding for the studies.

In addition to these proposed studies to be carried out under Public Law 96–151 as amended, CDC is currently conducting, with support from the Veterans Administration and the Department of Defense, a case-control epidemiologic study to determine whether Vietnam veterans may have a higher risk of fathering children with birth defects. The study "cases" are the families of babies born with major birth defects during the years 1968–80 in metropolitan Atlanta and who have been registered by CDC's Metropolitan Atlanta Congenital Defects Program. Study "controls" are families of babies without defects who were born in the Atlanta area during the same time period and identified through State of Georgia birth certificates. This study is designed to include the families of about 5,400 case babies and 3,000 control babies.

The major objective of this study is to determine whether an unusually high proportion of fathers of babies born with defects served in Vietnam. This comparison will yield an estimate of the risk of fathering a child with a defect for Vietnam veterans relative to that risk for non-veterans. Because information about other potential risk factors for birth defects will be gathered, this study will permit an evaluation of their contribution, both in Vietnam veterans and in the population at large. Data collection is scheduled to be completed by the end of this year, with preliminary analysis to be accomplished shortly afterward.

In addition to these studies either proposed or under way in CEH, NIOSH is conducting studies of the health effects of exposure to dioxin. Since 1979, NIOSH has been investigating the possible link between dioxin exposure and health effects in workers occupationally exposed to dioxin-contaminated products. The results of this research may be applicable to non-workers exposed to dioxin including residents of communities near hazardous waste disposal sites containing dioxin and among veterans of the Vietnam conflict. In 1979, NIOSH began work on a registry of United States production workers who were potentially exposed to dioxin during the synthesis or formulation of substances contaminated with dioxin. These substances include such commonly used products as trichlorophenol; 2,4,5-trichlorophenoxy acetic acid (2,4,5-T), the herbicide which was one component of Agent Orange; and pentachlorophenol, a wood preservative.

After completion of the registry, our first research task will be to compare the causes of death in these workers to the causes of death in the U.S. population. Some of these workers had chloracne. It is generally recognized that chloracne is an indication that there has been definite exposure, so we will examine the health outcomes of workers with chloracne separately.

We expect to include about 6,000 workers in the study. As of May 1, 4,000 have been included in the registry. Enrollment will be completed by December of this year. We plan to have all information relating to the status of these workers collected and analyzed by March 1985, well before the final results of the Agent Orange Epidemiology Study will be available.

NIOSH is exploring other uses of the worker registry, including studies of certain illness and problems with reproduction among persons exposed. A decision to proceed with these kinds of studies depends on scientific feasibility and availability of resources.

Since most of the workers included in the NIOSH registry were exposed during the period 1940–1970, we expect to be able to find those diseases with long periods of latency. However, we propose to continue to evaluate the health status of these persons at 5 year intervals into the future.

There are also workers exposed to dioxin in other countries. The production workers in these facilities constitute a valuable study group. A contract was awarded to the International Agency for Research on Cancer (IARC) by the National Institute for Environmental Health Sciences (NIEHS) to establish and maintain an international register of persons exposed to phenoxy acid herbicides and contaminants, parallel to the NIOSH registry. In December 1982, Dr. Patricia Honchar, on detail from

NIOSH to IARC, completed the feasibility assessment for this project. Cohorts from more than 20 production facilities throughout Europe and in Australia and New Zealand were evaluated to determine their suitability for epidemiologic study.

In addition to the above studies, NIOSH continues to examine reported association between dioxins and disease in occupationally exposed workers. In 1977, cases of soft tissue sarcoma were reported among Swedish lumberjacks who had previous exposure to phenoxy acid herbicides. This clinical observation led researchers in Sweden to conduct two separate epidemiologic case control studies which showed increased risk of soft tissue sarcoma. Subsequently, four independent small studies in the U.S. were reported to show no association between soft tissue sarcoma and work exposure to dioxin. However, when data from the 4 studies (which include only 3 cases with soft tissue sarcoma) were combined, the association noted in the Swedish studies was corroborated. Later, four additional persons who worked at 2,4,5-T production facilities were reported to have soft tissue sarcomas. At NIOSH, work is currently underway to gather pathologic specimens and the work histories for all seven cases. NIOSH will evaluate the histories of exposure, and the pathology will be reviewed by the Armed Forces Institute of Pathology. The goal is to gain an understanding of any common characteristics which may exist among the sarcoma cases and to focus medical expertise on the question of the legitimacy of grouping different types of sarcomas.

We feel that information suggesting an association of soft tissue sarcoma in humans and exposure to dioxin-contaminated products is accumulating. Careful epidemiologic analyses are needed. The question of an association of sarcomas and exposure to phenoxy acids and chlorophenols is being addressed in the NIOSH Dioxin Registry mortality study, and would be addressed by the IARC study. In addition other studies, such as case control, are now being proposed and being conducted. Epidemiologic studies like these will further delineate the association.

In summary, we are proceeding with all deliberate speed on the Agent Orange and Vietnam Epidemiology Study. The Birth Defects Study, studies of dioxin exposed workers in the U.S. and other countries, continued study of the soft tissue sarcoma issue, combined with the results of other studies, some of which you are hearing about today, should help provide answers to the questions we all seek.

Mr. Chairman, that concludes my formal remarks. My colleagues and I will be happy to answer any questions you or other members may have.

DEPARTMENT OF HEALTH AND HUMAN SERVICES,
OFFICE OF THE SECRETARY,
Washington, D.C., May 16, 1983.

Hon. G. V. (SONNY) MONTGOMERY,
Chairman, Committee on Veterans' Affairs,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Attached are responses to questions you submitted for Dr. Vernon Houk, Director, Center for Environmental Health, Centers for Disease Control to be included in the May 3 hearing record of the Subcommittee on Oversight and Investigations.

Please let me know if I can be of further assistance.

Sincerely yours,

THOMAS R. DONNELLY, Jr.,
Assistant Secretary for Legislation.

Attachment.

Question. After the Centers for Disease Control study has started, when will information be available on the mortality assessment of the study cohorts?

Answer. We estimate that the release of the mortality study analysis will be about 41 months after the start of the study.

Question. Do you plan any interim reports on the overall study prior to the scheduled completion date?

Answer. This decision has not yet been made, but probably will be made during the scientific peer review of the completed protocol. There are both advantages and disadvantages to interim reports. Certainly, we recognize that there will be interest in the study results, and we want to share significant facts as soon as we can. But in any epidemiologic study—more so in one this large—there is questionable wisdom in announcing any "result" before all the data have been collected and analyzed. Also, the process of preparing interim reports may actually delay completion of the study.

TESTIMONY OF CONGRESSMAN TOM DOWNEY

Mr. Chairman and Members of the Committee, I appreciate the opportunity to address the committee this morning regarding the Agent Orange issue which is of vital concern to all of us. My colleagues and I have been besieged with questions and letters over the last few years from Vietnam veterans who are concerned about exposure to Agent Orange. A question asked by many, "What is the Veterans Administration doing to help me?," has become an embarrassing one to answer. The Vietnam veteran has tried turning to his government for answers and help and has been sorely disappointed.

The following is a section of a letter from a Vietnam veteran who is seriously ill due to exposure to Agent Orange. He describes how dissatisfied he was by the attitude of the doctor and the Agent Orange examination program itself.

"To me it was rather farcial to take laboratory work done months earlier which had, in no way, anything to do with Agent Orange * * * so, once again, the American people, in the institution of the Veterans Administration, gave me a slap in the face for my service in Vietnam * * * I found this program conducted by the VA amidst great ballyhoo and publicity to be ineffectual and as insulting was as their so-called 'Jobs-for-Vets' program of a few years ago. In an effort supposedly designed to reconcile the Vietnam vet with the rest of American Society, the major instrument for that reconciliation is doing more to widen the rift than to heal the wound! * * * The prognosis is for me is 55 percent chance of living five years if I take chemotherapy and experimental drugs * * * could all of this been caused by Agent Orange? Apparently, we'll never know because the VA doesn't want to find out * * * Bitter? Angry? Hurt? You bet your life I am!! I don't want their damned money, I just want a little help now that I am totally disabled and for my wife and children to have the satisfaction of knowing what really, in the final analysis, killed me! If not Agent Orange, fine, but let's not support anymore farces under the aegis of the VA such as the Agent Orange Screening!"

I think this is a very sad commentary. This particular veteran has expressed the sentiment of many Vietnam veterans who are disgruntled, disappointed and disgusted with the inertia exhibited by the Veterans Administration. The Vietnam veterans have pressing questions about chemicals with catch code names—questions about chemicals that can defoliate a jungle, but supposedly not harm young men—questions about the lack of real concern by an agency that should be offering help.

The VA reminds me of a misbehaved child sitting in the corner with a dunce cap while the Congress must act the part of the stern teacher with a switch. At this point, the VA should be black and blue. If I were issuing the VA a report card it would receive an "A" for procrastination and an "F" for concern and action for Vietnam veterans.

Obviously, the VA has chosen not to pay attention to Congress' complaints regarding their program. I realize that the subject of the hearing today is the status of federally conducted Agent Orange studies, however, my testimony will focus on the General Accounting Office report I released in October of 1982, entitled, "VA's Agent Orange Examination Program: Actions Needed to More Effectively Address Veterans' Health Concerns." I was both pleased and saddened to release the report. I was pleased that we in Congress have taken steps to try to solve the problems facing the Vietnam veteran and have confirmed veterans' charges against the VA. I was saddened that the VA, the government agency which is supposed to abide by its motto, "To Care for him who shall have borne the battle," cares very little.

I requested the GAO study over two and one half years ago. It covered 14 VA hospitals nationwide and according the the study, only one of the 14 medical centers adequately followed up on the health problems reported by veterans. The study clearly indicates that the VA has made little effort to insure that the problem is addressing veterans' health concerns. The study confirmed veterans complaints that medical examinations were incomplete. 891 veterans responded to the GAO questionnaire and 55 percent were dissatisfied with their Agent Orange examination. Those veterans said the following: 49 percent were dissatisfied with the interest VA personnel took in their health; 47 percent were dissatisfied with the thoroughness of the questions VA personnel asked them; 49 percent were dissatisfied with the opportunity they were given to ask questions; 57 percent were dissatisfied with the completeness of their agent orange examination; 80 percent were dissatisfied with the amount of information VA provided them about agent orange; 83 percent were dissatisfied with the amount of information they learned from VA about their own exposure to agent orange; 57 percent were dissatisfied with the amount of time VA spent on their examinations.

Another major finding was that the examinations were performed by physicians not always knowledgeable about the potential health effects of agent orange. The GAO report states that "* * * about half of the environmental physicians expressed negative attitudes about the Agent Orange program * * * environmental physicians at six of the facilities told us that the program was of little or no use * * *."

The study further confirmed that little or no attempt was made to provide veterans with information on Agent Orange. Although about 500,000 Agent Orange information pamphlets were distributed to VA facilities, less than 9,000 were sent outside the VA system. A $29,000 video tape on the Agent Orange examination program was mentioned by only two of the 112 VA facilities contacted in a GAO telephone survey. Only 4 of the 10 facilities provided the pamphlets to veterans who contacted the facility and only 24 of the 112 VA medical facilities GAO contacted by telephone survey told GAO about the pamphlet.

The sad irony is that the Vietnam veteran has literally been searching for answers while the VA practically hides its outreach materials. The GAO found that various states had established dioxin commissions and outreach programs which have proved very effective, unfortunately, the VA just doesn't follow suit. The VA doesn't reach out to those very veterans it was established to help.

Finally, the VA's $3 million computer registry, containing the names of 89,000 Vietnam veterans examined for symptoms of Agent Orange exposure is of little or no use. The registry is not meeting two of its primary objectives: (1) providing information on health problems experienced by Vietnam veterans and (2) facilitating follow-up with veterans if necessary. Why is it not meeting its own objectives? The study found that "the registry does not contain the specific diagnoses of health problems and lacks adequate exposure and medical history information to compare veterans' health problems with their degree of exposure to agent orange or the area of Vietnam where they served." As far as is usefullness for follow-up, the VA did not include veterans addresses in the registry and the GAO found that at half of the facilities visited, the locator cards did not contain adequate information for follow-up with veterans.

In a letter dated, November 10, 1982, I requested that the Administrator of the Veterans' Administration discontinue the Agent Orange registry. The Administrator responded by claiming that the registry had ". . . proved to be useful mechanism * * *" and that "Full information can be retrieved from the medical center's files and the computerized registry provides an index to the additional data there." I find this highly questionable since the GAO found that "* * * only 8 of the 14 medical facilities visited maintained adequate information in the locator card system to permit follow-up contact with veterans, and none of the facilities routinely updated the locator card files * * *." Generally, the cards were missing the veterans' city, state and zip code. It is serving no purpose and approximately, $892,000.00 is spent annually on the registry. This money could be used in another area of the program. I am once again stating that the registry should be discontinued.

There is no question that that integrity of the Veterans Administration is at stake. How many times must the VA be reprimanded? How often does the VA need to be reminded of its function and responsibilities? How often must Congress ride on its tail? When will it start to move? I believe at this point it is up to the Congress to see that the VA is forced to improve its Agent Orange Examination Program. The Committee can be instrumental in providing oversight to see that the recommendations of the General Accounting Office are fully implemented by the Veterans Administration. The GAO report is a fine piece of work and could greatly benefit the Vietnam veteran. The VA continually promises that it will provide adequate care for these Vietnam veterans and yet the results just don't materialize.

There is no question that additional hearings are necessary so that the VA is forced to answer to this committee for its lackadaisical attitude. If the recommendations of the report were implemented, the Agent Orange Examination Program could benefit a great number of Vietnam veterans and perhaps restore some faith in the program. We cannot expect the Vietnam veteran to believe that the Veterans Administration is adequately assisting him if we don't believe it ourselves.

In conclusion, I offer the following points: First, the Agent Orange registry is a mockery and should be discontinued. Secondly, there is a tremendous need for improved outreach and coordination of outreach materials. These materials should be reaching these veterans. Finally, I believe that oversight by the committee will insure this and also whether or not the examination program has been improved to meet the health care needs of the Vietnam veterans exposed to Agent Orange. Once again, I refer to the letter by the Vietnam veteran from Virginia who is right when he says that the way this program is being run widens the rift rather than heals

the wound. The VA's inaction and unresponsiveness just adds salt to the wound. The time for healing is now.

STATEMENT OF DONALD L. CUSTIS, M.D., CHIEF MEDICAL DIRECTOR, DEPARTMENT OF MEDICINE AND SURGERY, VETERANS ADMINISTRATION

Mr. Chairman and Members of the Committee, Good morning. We are pleased to have the opportunity to appear before this Committee for the purpose of reporting to you on the efforts of the Veterans Administration (VA) to resolve the health care issues raised by veterans' exposure to the defoliant Agent Orange. Many of the concerns first expressed by some Vietnam veterans in 1978 continue to be voiced across the nation. We have listened to these concerns and in my opinion have been responsive to them. It is my belief that a great deal of progress has been made in the education of our health care staff to recognize the extent and depth of these concerns in order that, as an agency, the VA can respond in a manner which reflects compassion, respect and understanding. The establishment of a special office with the Department of Medicine and Surgery to deal expressly with these concerns, the identification of resources, the initiation of policy, and annumber of Agent Orange-related research activities demonstrate evidence of our commitment to provide health care to Vietnam veterans while, simultaneously, seeking answers to the many complex scientific and medical questions raised by the Agent Orange issue.

Every effort has been made to implement fully the provisions of significant legislation related to Agent Orange, specifically, Public Law 96–151 enacted December 20, 1979, and Public Law 97–72 enacted November 3, 1981. The transfer, on January 14, 1983, of the epidemiology study to the Centers for Disease Control (CDC), was implemented at the request of this Committee in order to expedite this most important effort. We will review, later in this testimony, the details of the interagency agreement effecting the transfer of the study from the VA to CDC.

Today we will report on the status of the VA's Agent Orange Registry program and on a variety of Agent Orange related research efforts that we have undertaken or supported, including a Vietnam Mortality Study; the Vietnam Experience Twin Study; a Retrospective Study of Dioxins and Furans in Adipose Tissue and 10 specially-solicited research projects by the VA scientific research staff. Other efforts include funding support of the Center for Disease Control's Birth Defects Study; development of a series of monographs for medical and scientific professionals on Agent Orange and related subjects; an update of the analysis of the scientific literature as originally mandated by Public Law 96–151; activities of the Chloracne Task Force (CTF); the development of a special Vietnam service indicator in the VA's Patient Treatment File (PTF); Agent Orange-related activities of the Department of Veterans Benefits; cooperation and coordination with other federal and state bodies; and finally, comments on international research on Agent Orange and other phenoxy herbicides.

We are hopeful that our current extensive research program and the activities of other researchers will assist in our search for answers to the question of adverse health effects of exposure of Vietnam veterans to Agent Orange. We assure the Committee that our interest in obtaining these answers will continue on behalf of concerned Vietnam veterans and their families.

In furtherance of this objective, I am happy to report that Dr. Han K. Kang, formerly a senior epidemiologist with the Occupational, Safety and Health Administration (OSHA) in the Department of Labor has joined the Agent Orange Projects Office. Dr. Kang is responsible for managing the technical aspects of Agent Orange-related research, and will report directly to Dr. Barclay M. Shepard, Acting Director of the Agent Orange Projects Office. Dr. Kang received a doctorate in public health in 1976 from the University of California at Los Angeles. Subsequently, he had 3 years of post-doctoral training and research in environmental epidemiology. Dr. Kang's responsibility at OSHA included evaluating health hazards, especially cancer hazards in the workplace; estimating the magnitude of health risks and hazards under various exposure conditions; and developing occupational standards and guidelines to minimize these hazards. He is the author of numerous scientific papers concerning environmental and occupational health. Dr. Kang has been a member of national and international expert panels, and has played a key role in the preparation of major publications such as the report of the Federal Panel on Formaldehyde, Workplace Exposure to Asbestos, and monographs on the evaluation of the cancer risk of chemicals to humans.

In addition, we now have the full-time services of Dr. Patricia Breslin, a well known and highly experienced biostatistician who joined the Research Section of

the Agent Orange Projects Office on April 17. Dr. Breslin has had considerable experience in the areas of health care research, cancer epidemiology and occupational epidemiology. She has served on the faculty of the Department of Bistatistics at the University of Pittsburgh Graduate School of Public Health. Dr. Breslin joined the Government as senior statistician in the Office of Occupational Health Surveillance at the National Institute of Safety and Health Administration (NIOSH). In 1976 she became Director of the Office of Statistical Studies and Analysis at the Office of Occupational Safety and Health Administration (OSHA). In 1979 she was made Deputy Director, Directorate of Technical Support at OSHA, the last post held before joining the Agent Orange Projects Office.

Progress has been made in the full staffing of the Research Section of the Agent Orange Projects Office. An administrative officer and clerical support staff have recently joined the Research Section. We are now in the process of recruiting an experienced statistical programmer to support Dr. Kang and Dr. Breslin in their Agent Orange-related research activities.

AGENT ORANGE REGISTER

Monitoring and improving the Agent Orange Registry is a continuing effort. The Registry is the only systematic way the VA has to identify Vietnam veterans who are concerned about possible adverse health effects of exposure to Agent Orange. In August 1982, we issued DM&S Circular 10-82-154 entitled, "Agent Orange Registry Follow-up Activities". This circular instructed every VA health care facility to send Vietnam veteran who had already received an Agent Orange examination at that facility, a letter from the Administrator, a name and address update code sheet and a brief health questionnaire. The purpose of this effort was to obtain the current address of each veteran and to update our files for future mailouts of Agent Orange related information to Registry participants. The veteran's name and current address is being entered into the computerized registry. The computerized address list, will be updated as changes occur in the veteran's address.

The VA continues to examine concerned Vietnam veterans as participants in the Agent Orange Registry program provided at all VA medical centers and outpatient clinics. Since the establishment of the Registry in 1978 over 106,000 veterans have received an initial examination. In addition, 24,500 follow-up examinations have been provided. During the first quarter of fiscal year 1983, 6,422 initial examinations were performed and we are now averaging 2,100 Agent Orange-related entries per month.

Last month a completely revised Agent Orange Registry code sheet used to report information into the registry, was distributed to all VA health care facilities. This revised reporting system records the veteran's current address, exposure experience, the specific diagnosis of any health problems detected during the examination and related information. This revision will significantly improve the VA's ability to acquire more precise medical information on registry participants.

PUBLIC LAW 97-72

Mr. Chairman, since the enactment of Public Law 97-72 in November 1981, the Veterans Administration has fully upheld both the spirit and the letter of that law. Final guidelines providing specific instructions to implement this legislation have been sent to all our health care facilities. In addition, we have been monitoring the effect of this legislation through a system of reports in which we record and document the number of outpatient visits and hospital admissions resulting from the implementation of that law.

Our review of these reports indicates that approximately 9,400 Vietnam veterans were admitted for inpatient care under this law during the period February 1982 to February 1983. During this same period there were approximately 369,000 Agent Orange related outpatient visits to VA health care facilities. It should be pointed out that this initial analysis may not accurately reflect the true impact of this legislation in future years. For this reason, we will continue to monitor closely future reports and will keep you fully informed as to the impact of this legislation on VA health care rescurces.

MONOGRAPH SERIES

Mr. Chairman, it is our conviction that we must explore every approach that will assist us in providing up-to-date technical information of use to our health care staff. For this reason, we are preparing a series of scientific monographs for the education and training of these individuals. Steady progress is being made in this effort.

The monograph series is designed to provide useful scientific information on environmental factors that may have affected the health of military personnel serving in Vietnam. It is our belief that these monographs will be of such quality as to be useful to non-VA health care professionals as well. When completed, the monographs will be given wide distribution both within and outside the VA.

Three internationally recognized experts have agreed to prepare monographs. Dr. Ronald D. Hood, University of Alabama, will author a monograph on Agent Blue. Birth Defects, Genetics Screening and Counselling will be the subject of a monograph prepared by Dr. Annemarie Sommer, Children's Hospital, Columbus, Ohio. The monograph on Human Exposure to Phenoxy Herbicides will be prepared by Dr. Terry Lavy, University of Arkansas. All three authors are well along in the preparation of their respective monographs.

Final plans for a monograph on Chloracne are being made. Dr. Donald L. Birmingham, Clinical Professor of Dermatology, Wayne State University, Detroit, Michigan, will serve as senior editor of this monograph. Dr. Birmingham is a widely recognized expert in occupational diseases of the skin. It is anticipated that all four monographs will be published and available for distribution by mid-1984.

LITERATURE REVIEW UPDATE

In April of this year, we initiated action to update the report mandated by Public Law 96-151 entitled "Review of Literature on Herbicides, Including Phenoxy Herbicides and Associated Dioxins". The contract was awarded to Clement Associates Inc., on April 22, 1983.

In addition to an analysis of the scientific literature which has appeared since the previous effort, the updated report will focus on a number of more recent studies which pertain to herbicide exposure and health problems in humans. It is estimated that well over 500 such publications will be reviewed. Our goal is to be able to publish and distribute the updated report in early 1984.

I assure you Mr. Chairman that the VA will continue to provide Congress and others with current and complete information on the scientific literature dealing with this issue.

PATIENT TREATMENT FILE VIETNAM SERVICE INDICATOR

The Patient Treatment File (PTF) maintained by the Department of Medicine and Surgery is a large computerized data base which records information on all veterans admitted to VA medical centers. As such it has great potential for epidemiological research related to Vietnam veterans as well as other veteran groups. A major problem with this automated file, however, is that until July 1982, there has been no entry to identify those veterans who actually served in Vietnam. Effective July 1, 1982, the VA implemented procedures to record Vietnam in-country service in the PTF on all applicable veterans discharged from VA hospitals. The Vietnam service indicator will enable the VA to obtain specific diagnostic information on this group of veterans.

In addition, a Vietnam in-country service indicator now has been added to the patient data card and will enable medical center personnel to easily identify veterans with Vietnam service. This will assist us in assuring that Vietnam veterans are properly entered into the Agent Orange Registry and, in applicable cases, will identify veterans from whom tissue samples should be forwarded to the Armed Forces Institute of Pathology to be included in their Agent Orange Tissue Registry.

In order to determine the kinds of medical problems for which this group of veterans have, in the past, been receiving care as inpatients in VA medical centers, we selected a random sample of 15,000 Vietnam era veterans from the PTF. On September 29, 1982, the VA signed a contract with JAYCOR to review the military personnel records of these individuals for the purpose of establishing Vietnam service status. This will enable the VA to compare the health care needs of those veterans who actually served in Vietnam with those who did not.

EPIDEMIOLOGICAL STUDY OF AGENT ORANGE

As you will recall, Public Law 96-151 directed the VA to design and conduct an epidemiological study of veterans who were exposed in Vietnam to dioxins contained in herbicides, including Agent Orange. The VA entered into a contract with the University of California at Los Angeles (UCLA) to design a study, and subsequently, four reviews of the resulting protocol were accomplished, three of them by groups outside the VA.

It became evident during the protocol development that it would be difficult and time-consuming to determine who had been exposed to Agent Orange in Vietnam, and who had not. At one time it was believed that such a determination would be virtually impossible, but subsequent diligent efforts by the Army Agent Orange Task Force under the able leadership of Mr. Richard Christian have made it likely that groups or cohorts of exposed and unexposed Vietnam veterans can be identified.

The VA contracted with UCLA to design the study and asked non-VA experts to review the design because veterans had expressed doubts about the VA's objectivity. In addition, several members of Congress suggested that the credibility of the study would be enhanced by transferring the conduct of the study to the Centers for Disease Control. Subsequently, formal requests and recommendations for such a transfer were submitted to the VA by many members of Congress including the leadership of this committee.

Consequently, on January 14 of this year, the VA and the Department of Health and Human Services entered into an interagency agreement implementing such a transfer. We have agreed to provide $3 million to CDC in fiscal year 1983, and we have supported a request for additional personnel for CDC to initiate the study. The fiscal year 1983 request for personnel resources has been approved by the Office of Management and Budget (OMB). A request for an amendment to the fiscal year 1984 budget to support this important research effort is in final preparation.

The CDC has agreed to complete the study as expeditiously as possible, but not later than September 30, 1987. The CDC has been and will remain completely independent of the VA in designing and conducting the study. They have told us that they are considering two parallel studies, one to examine the effects of exposure to Agent Orange and the other to determine if there are any adverse health effects of Vietnam service in general. The latter is in keeping with the option provided in Public Law 97-72.

CDC BIRTH DEFECTS STUDY

In addition to the epidemiology study recently transferred from the VA, the Centers for Disease Control is proceeding in its conduct of a birth defects study in the Atlanta, Georgia, area. This study, which is centered around CDC's Metropolitan Congenital Defects Surveillance program, is continuing to be jointly funded by the VA, Department of Defense and the Department of Health and Human Services. Since 1968, the surveillance program has collected information about babies in the Atlanta area with birth defects. It is our understanding that CDC expects to complete the study by December 1983 or January 1984. We are continuing to monitor with great interest their progress in this significant research effort.

VIETNAM VETERAN MORTALITY STUDY

The Vietnam Veteran Mortality Study is a major research effort to assess mortality patterns of U.S. servicemen of the Vietnam era. The researchers will examine the information contained in the records of 60,000 decreased veterans who served during the Vietnam era (1964-75). The study will compare mortality patterns and specific causes of death between those who served in Vietnam and those who did not.

After selecting the study population from VA files, we are simultaneously collecting two types of information about each veteran: military service data from the military personnel record and medical data from the death certificate. The VA has let contracts for both of these activities and the work has begun.

We expect to complete the study by the end of 1984.

VIETNAM EXPERIENCE TWIN STUDY (VETS)

Progress is being made in the conduct of a Vietnam Experience Twin Study (VETS) of approximately 500 pairs of twins, where one twin served in Vietnam during the period of Agent Orange spraying and the twin sibling did not serve in Southeast Asia. The VETS project, conceived by a team in the VA Medical Center in St. Louis, will utilize a battery of psychologic, physiologic, and biochemical tests to measure the psychological and physical impact, if any, of service in Vietnam on Vietnam veterans. The VETS project team, which includes a principal and two coinvestigators, has been brought into the VA Cooperative Studies Program and assigned to the Cooperative Studies Center in Chicago. The transfer to the Center in Chicago was in recognition of the need to receive full support and assistance from the VA research group most experienced in conducting large-scale investigations.

Methods for selecting, finding, and recruiting the twins are being explored. Protocols are being prepared and will include pilot tests to validate the proposed physical and psychological measures employing identical and fraternal twins. Participants in the pilot tests will not be included in the study itself. An approved final protocol is anticipated in the next 4-5 months. The results of the study, however, cannot be expected for two to three years. We believe that this study will provide the most sensitive means for detecting subtle effects of Vietnam service and will therefore justify the necessary considerable expenditure.

RETROSPECTIVE STUDY OF DIOXINS AND FURANS IN ADIPOSE TISSUE OF VIETNAM ERA VETERANS

A small feasibility study conducted in 1979-80 showed that dioxin or TCDD can be detected and measured in adipose tissue removed from Vietnam-era veterans. The study revealed, however, that there was no clear relationship between levels of TCDD and Vietnam service, exposure to Agent Orange, or the current health status of the individuals from whom the tissue samples were obtained. In addition, nothing is known about the levels of TCDD in the general U.S. population. The VA and the Environmental Protection Agency have recently entered into an interagency agreement to determine the levels of TCDD in adipose tissue from a selected group of U.S. males of the Vietnam era veteran age group.

Since 1970, the EPA has collected fat samples for its National Human Adipose Tissue Study. These statistically representative samples from the general population have been analyzed for residues of selected pesticides and toxic chemicals. Additional tissue samples are still available for analysis from some individuals, including 555 men born between 1937 and 1952. Many of these veterans served in the military during the Vietnam-era and some served in Vietnam. Our study will measure the levels of TCDD in these samples and will thereby indicate whether service in the military and especially in Vietnam has had an effect on the TCDD levels. Work has already begun to obtain details about the 555 men, including their military service and other occupational history. We are also in the process of designing and validating a uniform method of analyzing for TCDD. The analysis is both exacting and time-consuming and we therefore do not expect final results until 1985.

CHLORACNE TASK FORCE ACTIVITIES

The VA's Chloracne Task Force (CTF) is charged with reviewing and evaluating skin conditions resumbling chloracne, coordinating special examinations of veterans with questionable skin conditions, developing a chloracne examination protocol and preparing a monograph on chloracne.

Dr. A. Betty Fischmann, Chairperson of the Task Force, has reconstituted its membership and is organizing a cooperating group from among the 24 full-time and 29 part-time VA dermatologists.

Two Task Force members have recently conducted an extensive review of the chloracne literature to assist in the indentification of significant diagnostic criteria as the basis for a dermatology quiestionnaire which is nearing completion. This questionnaire will provide the basis for computerizing pertinent medical information obtained from a special standardized examination of veterans claiming skin conditions related to Agent Orange exposure.

A detailed view of the records of more than 3,000 Vietnam veterans who had filed compensation claims with the Department of Veterans Benefits resulted in a group of 14 veterans who might possibly have chloracne. Using the services of three prestigous non-VA clinics, 13 of these 14 men have received a complete medical examination including a special dermatological evaluation. The remaining veteran, although located, has not yet been examined due to his remote job location. None of the 13 veterans examined was diagnosed as having chloracne although one man gave a history of exposure that suggests that he might have had chloracne. His condition is being evaluated further. Eleven of the 13 veterans, including the one still being evaluated, were diagnosed as having some form of acne. The other two had non-acneform skin diseases.

SPECIALLY SOLICITED RESEARCH ACTIVITIES

During Fiscal Year 1982, the VA's Medical Research Service approved 10 new Agent Orange research studies that investigate the impact of low levels of exposure to Agent Orange on basic biological processes.

These studies will include an analysis of the effects of the components of Agent Orange on liver cell function on neurobehaviorial functions and the biochemistry of

23-542 O - 83 - 10

chloracne. The studies are in addition to three studies still underway, two of which were initiated prior to the special solicitation.

We expect to initiate in Fiscal Year 1984 another 10 studies dealing with possible adverse health effects of exposure to Agent Orange and related herbicides.

DEPARTMENT OF VETERANS BENEFITS AGENT ORANGE INITIATIVES

Mr. Chairman. The Department of Medicine and Surgery's efforts on behalf of Vietnam veterans concerned about the possible adverse health effects of exposure to Agent Orange are complemented by the activities of the Department of Veterans Benefits (DVB). We are trying to assure that all DVB personnel who deal directly with the public are knowledgable regarding the issue of Agent Orange and are capable of providing accurate information and timely assistance to veterans.

The VA maintains a nationwide toll-free telephone service and personal interview units in all 58 regional offices. When asked about Agent Orange, veterans benefits counselors conduct personal or telephone interviews to inform individuals of the examination and treatment program provided by the VA. In addition, VA medical center personnel frequently refer veterans to the appropriate DVB regional office for help and guidance in filing a claim. If a service-connected disability is alleged, benefits counselors provide assistance in filing a claim for VA compensation.

Veterans Services Division personnel also respond to invitations from various groups to discuss Agent Orange-related issues and to appear on television or radio talk shows to provide information on the VA's Agent Orange program. These individuals are generally available as a community resource in distributing information on VA benefits and services. We view these activities as essential to maintaining communication between the VA, Vietnam veterans and the general public.

INTERNATIONAL ACTIVITIES

A number of research studies that are important for the Agent Orange and other Vietnam veteran issues are in progress or have been completed in other countries. Within the past few months, the Australian "Case Control Study of Cogenital Anomalies and Vietnam Service (Birth Defects Study)", the New Zealand Study on "Cogenital Defects and Miscarriages Among New Zealand 2,4,5-T Sprayers", the Finnish Study "Mortality of 2,4-Dichloro-phenoxyacetic Acid and 2,4,5-Trichlorophenoxyacetic Acid Herbicide Applicators in Finland" and the "New Zealand Soft Tissue Sarcoma Case-Control Study" have been reported.

The Australian Birth Defects Study examined records from 34 hospitals and 4 cytogenetic laboratories to identify infants born with birth defects. Matched healthy infants born in the same hospitals served as controls. The fathers of cases and controls were identified in 8,517 instances and their service in the army was determined as well as their duty in Vietnam. In all, 127 of the fathers of children with birth defects were Vietnam veterans, while 123 Vietnam veterans fathered normal, healthy, children. There was no evidence that service in Vietnam increased the risk of fathering a child with a birth defect.

In New Zealand the manufacture and spraying of phenoxy herbicides has exposed workers to these chemicals. Both sprayers and their wives are exposed during field spraying and in the purchase and handling of chemicals. A survey of 989 professional sprayers and a control group of agricultural contractors determined the numbers of births, cogenital defects, and miscarriages. The sprayers had 1.19 times as many children with birth defects and 0.89 times the number of miscarriages. The differences are not statistically significant. Exposure of the wives also had no detectable reproductive effect.

A Finnish study reported the death rate in a group of 1,926 men who sprayed the ingredients of Agent Orange. The herbicide exposure was generally rather low but the deaths among the sprayers were only 54 percent as great as expected from experience with the general population. Later the death rate rose to 81 percent of the expected value. The sprayers experienced no increase in their death rate from cancer. Types of cancers among them were what would be expected in the general population.

Earlier, two case-control studies by a single Swedish group were conducted among forestry and agricultural workers. A total of 52 cases of soft-tissue sarcoma and 206 "control" men without sarcomas were selected from registers in northern Sweden and the patients or their survivors were questioned about earlier occupational exposures to herbicides and other chemicals. A similar study of 110 cases and 219 "control" men was made in southern Sweden where farming is more common than forestry. It was then possible to calculate the relative risk of contracting the sarcomas among those thought to have been exposed and those deemed not to have been. The

calculated risk was about 5 times as great for exposed men. The investigators concluded that "Exposure to phenoxy acids and chlorophenols might constitute a risk factor in the development of soft-tissue sarcomas." Several cases of soft tissue sarcoma have been reported among chemical workers in the United States.

Scientists in New Zealand have just released the results of their studies on soft tissue sarcoma. A case-control study of 102 men with soft tissue sarcomas and 306 matched controls reveal no higher rate of sarcomas among men working in agriculture and forestry where phenoxy herbicides have been used extensively for many years. The findings so far suggest that exposure to phenoxy herbicides has no significant role in the development of soft tissue sarcomas.

In Italy, a case-control study of approximately 100 cases of soft tissue sarcoma and 300 controls is currently underway. The Danish Cancer Registry in Copenhagen will study the cancer incidence in more than 3,500 persons employed in the production of phenoxy acid herbicides. Data from both studies are due within this next year or so.

In summary, studies from several countries around the world are providing results that will contribute to resolving the Agent Orange controversy. Our VA scientists will continue to interact with the international scientific community and will keep this committee informed on the progress of their research.

SUMMARY

Mr. Chairman, as you can see, the VA's approach to resolving the Agent Orange issue is multi-faceted. We stress the continuing delivery of health care to eligible Vietnam veterans, special Agent Orange-related examinations within the Agent Orange Registry, significant research related to Agent Orange and other phenoxy herbicides, updating the review of worldwide scientific literature, professional staff education, and finally, information activities designed to make Vietnam veterans and the general public aware of the latest known scientific information on Agent Orange.

We will continue to pursue scientific answers to the health care issues generated by Agent Orange. In the meantime, we will continue to deliver quality health care to eligible Vietnam veterans and attempt to allay fears as well as we can by direct contact with concerned veterans and their organizations. Further, we will continue to cooperate closely with other organizations such as the Agent Orange Working Group (AOWG), the Congress, State legislative offices, and various Agent Orange commissions at the state level. In all our efforts, we strive to serve the needs of Vietnam veterans concerned about the possible adverse health effects of Agent Orange.

That concludes my statement, Mr. Chairman. I will be pleased to answer any questions you or members of this Committee may have.

VA's Comments on the GAO August 6, 1982, Draft Report, "Improvements Needed in VA's Efforts to Assist Veterans Concerned About Agent Orange"

GAO recommends that the Administrator, through the Chief Medical Director: "Require VA medical facilities to include the agent orange examination program in the facilities' systematic internal review process."

I agree, but the systematic internal review program leaves to each medical center the selection of specific facility activities to review at any one time. However, the systematic external review program (SERP) reviews the quality assurance of each center's ambulatory care program. In the future, the SERP medical team member who surveys ambulatory care will review the agent orange program, using detailed criteria being developed. This will accomplish the intent of this recommendation.

"Require environmental physicians to review all examination records to insure that examinations are thorough and documented."

This recommendation is already implemented. The January 14, 1981, Department of Medicine and Surgery (DM&S) Circular 10-81-12 directed environmental physicians to advise veterans of the results of their examinations. This was further stressed in a February 11, 1981, Chief Medical Director's Information Letter, IL 10-81-5. Environmental physicians were directed to inform veterans of the positive or negative findings of their examinations. The physicians prior review of each medical record is implied in these directives.

"Direct VA physicians to document all findings for every factor described in VA agent orange program circulars for each examination."

I do not concur. The VA is revising the agent orange examinations reports and any specific directions concerning documentation are better given at the time the new procedures are distributed.

"Reemphasize to VA medical facilities the importance of providing examinations in a timely manner."

I believe the problem of excessive delays in agent orange examination schedules no longer exists. For the past two years, the VA has continually emphasized the need for prompt examinations. For the past 17 months, each facility has been reporting its monthly backlog and the number of agent orange examinations performed. From May through July 1982, only one facility reported a backlog of 50 or more scheduled examinations. This facility is Anchorage, Alaska, where there is a regional office but no hospital or clinic, and where it is difficult to obtain contract physicians to examine the waiting veterans. Other VA facilities have short waiting lists and almost always perform examinations within 30 days after application.

"Direct VA medical facilities to insure that examining physicians are familiar with available information on agent orange and that they provide this information to all veterans examined."

I agree, and examining physicians will be kept informed of all agent orange information as it becomes available. This will be accomplished through national conferences, information mailings, and telephone conferences. I do not agree, however, that this information should be provided to all veterans examined as it would serve no useful purpose. Examining physicians should discuss agent orange matters with the veterans as questions are raised, not as a routine to be followed as part of each examination.

"Discontinue the computerized agent orange registry, and maintain a list of veterans who have had agent orange examinations."

I do not concur in this recommendation. The agent orange registry is the most extensive list of Vietnam veterans concerned about agent orange. The registry program is an important mechanism for assisting the VA in detecting significant health trends in the Vietnam veteran population, which may differ from that of the general population. Descriptive information generated from the registry enables the VA to review those areas requiring more indepth medical/scientific analysis. It also serves as an index to the medical record of the examination where more detailed information can be sought as needed.

"Revise the exposure history form, and use the standard VA physical examination and medical history forms to gather more thorough information during agent orange examinations."

I concur. The March 19, DM&S Circular 10-81-54 stipulated that standard physical examination forms (VAF 10-7978 or SF 506) be used to document the physical examination. This circular is being revised and will include instructions on the use of physical examination forms. The exposure history forms (VAF 10-20681 and VAF 10-9009) used in the agent orange examination process are also being revised. It is anticipated that these revised forms will be available to VA health care facilities in December 1982.

"Direct VA medical facilities to inform veterans seeking agent orange examinations of the examination's limitations."

I concur. It should be noted that among other activities, the VA prepared and widely distributed the pamphlet, "Agent Orange Information for Veterans Who Served in Vietnam—Questions and Answers." This pamphlet specifically addresses the limitations of the examination. During education conferences on agent orange in September 1979 and May 1980, environmental physicians were instructed to explain the purpose of the examination process to veterans receiving examinations. In meetings with the administrative staffs of veterans' organizations, the VA explained the nature and limitations of the examination. The media was also informed of the intent, nature, and limitations of the examination. During an August 13, 1982, nationwide conference call, the health care staff was instructed to define the limitations of the agent orange examinations. These instructions will be outlined in a Chief Medical Director letter scheduled for publication this month.

"Develop and analyze statistics on the kinds of skin problems, tumors, and birth defects identified in agent orange examinations and make this information available to veterans."

I do not concur because the intent of this recommendation, as stated, is not clear. Information gained by the development and analysis of such statistics cannot be used to compare the prevalence of illnesses or disabilities reported by Vietnam veterans with that of the general population because the veterans examined are a self-selected population and more prone to report real or perceived illnesses or disabilities. Any statistical report of prevalence, based on registry data, implies a much

greater prevalence among all Vietnam veterans than is actually the case and, therefore, might serve to unduly alarm veterans without providing useful information.

"Emphasize to VA medical facilities the importance of sending tissue samples taken from veterans who served in Vietnam to the Armed Forces Institute of Pathology."

I concur. The VA continues to emphasize the importance of the special registry at the Armed Forces Institute of Pathology (AFIP) and will continue to urge VA medical facilities to send pathological material obtained from any Vietnam veteran. A Chief Medical Director's letter reemphasizing the need to provide tissue samples to the AFIP will be released this month. In addition, this issue was addressed during an August 13, 1982, nationwide conference call with VA field staff. Earlier VA activities relating to the AFIP include:

1. A series of Circulars (10-78-234, 10-79-239, 10-80-229, and 10-82-37) was issued directing all VA medical centers to send this material to the AFIP. On March 16, 1981, and March 22, 1982, this matter was discussed during nationwide conference calls with environmental physicians, chiefs of staff, and other key officials at all VA medical centers.

2. Transcripts of meetings of the VA Advisory Committee on Health-Related Effects of Herbicides are sent to all environmental physicians.

3. The AFIP registry was publicized in the July 1981 issue of Agent Orange Bulletin.

4. Earlier poor cooperation in submitting tissue samples was due in large part to the lack of an indicator for in-country Vietnam service in VA medical records. This deficiency was corrected by DM&S Circular 10-82-128.

"Hasten the development of a monograph on agent orange's potential for causing birth defects."

On June 30, 1981, I approved funds for a monograph series. One of the series, "Birth Defects/Genetic Screening," was funded for Fiscal Year 1982. The VA is now seeking a consultant who will prepare that monograph which has a December 1983 completion date.

"Direct VA medical facilities to provide available information to veterans concerned about birth defects, or refer veterans to genetic counseling services for such information."

I concur, and this recommendation has been implemented. On September 18, 1981, the VA forwarded a copy of the March of Dimes Birth Defects Foundation publication, "Birth Defects/Genetic Services," to all environmental physicians. This publication provides an international directory of genetic counseling services. The physicians have been instructed to refer veterans to one of those facilities when they request special genetic testing and counseling.

"Direct VA medical facilities to follow up with all veterans examined before January 1981 to insure that they have been provided their examination results."

I do not agree that veterans should be provided with the results of examinations performed before January 1981 because of their greatly diminished usefulness. In fact, receiving belated results 1 or 2 years after examination could unduly alarm veterans. The results of agent orange examinations are permanently maintained in the veterans' medical records and are available to veterans upon request.

"Direct all VA medical facilities to offer to send the agent orange pamphlet to all telephone callers interested in information about agent orange, and advise callers when and where they can see the agent orange film."

I concur. This recommendation is being implemented. The pamphlet, "Worried About Agent Orange?" is now out of date and out of print. However, three new pamphlets were distributed early this year and cover a broad spectrum of information on this important issue. More will be published and made available to all VA facilities. During August and September conference calls, VA medical centers were advised to used the agent orange pamphlets and film. These calls will be followed by a Chief Medical Director's letter reminding them of the recommended actions.

"Use public service announcements to advise veterans of VA agent orange services."

I concur. The VA is using public service announcements (PSA's) to provide an information and education program for concerned Vietnam veterans and their families. An automated mailing list was developed for the agent orange registry and in June, over 80,000 letters were mailed to veterans on the registry, along with 2 newly published information pamphlets. Mailings will continue as additional publications are issued.

Other outreach efforts will include, but not be limited to, a display and franked card return mailers at all VA facilities, print and broadcast PSA's directing inter-

ested parties where to write or call for more information on agent orange, and additional fact sheets and an agent orange digest.

Any national broadcast campaign of PSA's must be carefully handled. Because most PSA's are of 20- and 30-second duration, the message must be necessarily confined. This has the potential of creating "unrealistic expectations" which GAO is concerned about. A national broadcast campaign could also create unwarranted fear and anxiety among veterans and dependents, especially since there is no conclusive scientific or medical evidence establishing a cause-and-effect relationship between exposure to agent orange and health problems in Vietnam veterans.

"Work with State veterans affairs offices to advise veterans of available VA agent orange services."

I concur, and assure you that the VA takes seriously its obligation to keep veterans informed of what is presently known about agent orange and what services are available to veterans. Information material, including news releases, is distributed to VA facilities, to veterans organizations, to the media, the Congress, and upon request. All testimony before the Congress by the VA and other agencies is made part of public record. VA officials deliver speeches, participate in public seminars, news media interviews, and other forums dealing with agent orange. The VA has produced a video tape for showing, as appropriate, internally, and externally. Although attempts are made to inform every Vietnam veteran about agent orange, the examinations, and provisions for treatment, it should be noted that the VA has an especially difficult task because there is no list of the 2.4 million veterans who actually served in Vietnam.

GAO also recommends that: "the Congress consider whether 38 U.S.C. 3010(g) should be amended to extend the period of retroactive compensation for agent orange-related disability claims to the date the claim was filed."

I believe this recommendation is premature. At present, the best available scientific evidence fails to indicate that exposure to agent orange or other herbicides used in Vietnam has caused any long term health problems for veterans. A number of research efforts are underway, or will soon commence, that will attempt to shed more light on this difficult question. I believe it is more appropriate to await the results of the various studies before making any recommendations for changes in the laws regarding the effective date of an award of disability compensation benefits. Changing the law before the scientific uncertainties are resolved could create false expectations in veterans justifiably concerned over the issue.

MAY 5, 1983.

Mr. JOHN MURPHY,
General Counsel, Veterans' Administration,
Washington, D.C.

DEAR JOHN: During the May 3rd Subcommittee on Oversight and Investigations hearing on Federally conducted Agent Orange studies, the Honorable Dan Burton questioned the Veterans' Administration witness, Dr. Donald L. Custis, concerning a possible Agent Orange outreach program. Mr. Burton suggested using existing data files, including those of the Internal Revenue Service, to develop a mailing list of Vietnam era veterans.

I am aware of the limitations imposed by certain Federal statutes in obtaining private information from governmental and other sources, and request that you provide the Subcommittee with a historical prospective of Veterans' Administration activities in this regard, including citings of precedents.

I also request that you provide alternative Agent Orange information outreach methodologies which may be considered if statutory limitations prohibit or preclude timely development of the address list suggested by Mr. Burton.

The information you provide will be included in the May 3rd hearing record. Therefore, I request that you provide the information to me by close of business on Monday, May 16, 1983.

Sincerely,

G. V. (SONNY) MONTGOMERY,
Chairman.

VETERANS ADMINISTRATION,
OFFICE OF GENERAL COUNSEL,
Washington, D.C., July 5, 1983.

Hon. G. V. (SONNY) MONTGOMERY,
Chairman, Committee on Veterans' Affairs, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: I am pleased to respond to your inquiry of May 5, 1983, concerning development from existing data files (including those of the Internal Revenue Service (IRS)) of a mailing list of Vietnam Era veterans to be used for Agent Orange outreach purposes.

As you indicated in your letter, the Veterans Administration (VA) had identified the existence of legal impediments to obtaining veterans' addresses from the IRS for use for Agent Orange purposes. However, special legislation was recently enacted which now permits VA use of IRS addresses for Agent Orange notification purposes. Notwithstanding this legislation, however, practical considerations have prevented the Agency from utilizing this authority. Specifically, no list of those who served in Vietnam exists as records created by the Department of Defense and the VA were not maintained and have not been kept or organized in a manner which permits reasonable access to the identities of the estimated 2.5 million servicemembers or former servicemembers who served in Vietnam.

Since the creation of a list of that magnitude would be extremely difficult and time-consuming, the VA has followed a carefully developed Agent Orange outreach program targeted at those veterans who have expressed an interest in Agent Orange issues. In this connection, the VA has mailed information to Vietnam veterans who have received examinations as part of the Agency's Agent Orange registry program. In addition, an Agent Orange newsletter is being prepared for quarterly distribution. Expenditures in this area were approximately $19,000 in fiscal year 1982 and $68,000 in fiscal year 1983 (to date).

Additionally, the VA for several years has been engaged in public forums designed to educate veterans service organizations, state groups, local media and others, of the Agency's actions, the results of Agent Orange research and available services regarding Agent Orange. In this regard, it should be noted that the VA has met with the various state Agent Orange commissions/committees on numerous occasions and has provided them periodically with materials which have been used in intensive outreach efforts. Moreover, Agent Orange pamphlets and an award-winning VA film on Agent Orange (which cost $42,000 to produce) have been distributed and are available to Vietnam veterans and their families at VA facilities. To assist VA DM&S field employees in educating Vietnam veterans about Agent Orange, bimonthly telephone conference calls are initiated from VA Central Office. Finally, a videotape presentation aimed primarily at VA employees is expected to be completed late this summer (at an estimated cost of $20,000) on the Agency's Agent Orange Policy and Procedures. This videotape, which could be easily updated as future developments occur, will be made available to the VA's 172 hospitals and 58 regional offices.

You may be assured that VA outreach efforts will fully involve print and broadcast public service announcements on carefully prepared factual data on Agent Orange and available VA services. In doing so, we will also continue to be concerned that these informational efforts not create undue anxiety or fear among veterans and dependents on the one hand or unrealistic expectations on the other hand. It is expected that over $50,000 will be spent in these efforts alone in fiscal year 1983.

It should be noted that, as of April 30, 1983, over 114,000 veterans have been examined and entered into the Agent Orange registry, with an average of 2,100 new examinations being performed each month. Moreover, during the period of February 1982 to February 1983, over 369,000 outpatient visits and 9,400 hospital admissions to treat veterans exposed to Agent Orange under the provisions of Public Law 97-72 occurred at VA health care facilities.

The Agency's continuing specific objectives of Agent Orange outreach are as follows:

(1) To make known the availability of appropriate medical care under Public Law 97-72, to all those veterans who believe their health has been adversely affected by Agent Orange;

(2) To make known that the VA continues to give Agent Orange Registry examinations; and

(3) To report on the progress of all research being conducted in the area of Agent Orange and dioxins.

The VA remains open to any further suggestions of approaches to outreach.

Sincerely yours,

JOHN P. MURPHY,
General Counsel.

VETERANS ADMINISTRATION,
OFFICE OF GENERAL COUNSEL,
Washington, D.C., June 1, 1983.

Hon. G. V. (SONNY) MONTGOMERY,
Chairman, Committee on Veterans' Affairs,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for affording me this opportunity to respond to your questions regarding the status of Federally conducted Agent Orange studies.

I am pleased to provide you with the enclosed answers. If additional information is desired, do not hestitate to contact me.

Sincerely,

JOHN P. MURPHY,
General Counsel.

Enclosure.

Question. 1. In your testimony, you indictate that approximately 9,400 Vietnam veterans were admitted for inpatient care under the provisions of Public Law 97-72. What were the major disabilities of those veterans?

Answer. To date, only the running count of Vietnam veterans admitted under the provisions of Public Law 97-72 is reported. No separate diagnostic record of these patients is maintained centrally.

Question. 2. In light of the many possible means of exposure to Agent Orange, can a truly accurate differentiation between groups of exposed and unexposed Vietnam veterans be accomplished?

Answer. The Veterans Administration, the Department of Defense, and the Agent Orange Working Group's Scientific Panel have spent many hours with the personnel of the Army Agent Orange Task Force in order to develop methods for defining and determining the extent of exposure of ground troops to Agent Orange in Vietnam. It is now thought that a satisfactory, if not completely accurate, separation can be made between veterans who were likely to have been heavily exposed and those who were unlikely to have had contact with the herbicide. A group with an intermediate likelihood can also probably be identified.

Question. 3. In addition to exposure to herbicides, what are other possible causes of chloracne?

Answer. A wide variety of organic chemicals containing chlorine and bromine can cause chloacne. Representative groups include the polychlorinated naphthalenes, polyhaloginated biphenyls (PCBs and PBBs), polyhalogenated dibenzofurans, hexchlorodibenzo-dioxins, tetrachlorodibenzofurans, tetrachloroazoxybenzene, tetrachloroazobenzene, and tetrachlorobenzenes. Some of these chemicals, especially PCBs and PBB, are widely used throughout the United States.

Question 4.A. What determines whether or not an individual is placed on the Armed Forces Institute of Pathology Agent Orange Tissue Registry?

Answer. The Armed Forces Institute of Pathology (AFIP) serves as a reference laboratory for diagnosing anatomical specimens obtained by biopsy or at autopsy. The pathologists at AFIP do not themselves perform the autopsies or biopsies. An individual is placed in the Agent Orange Tissue Register when a biopsy or autopsy tissue sample is sent to AFIP and labeled as having come from a veteran claiming exposure to Agent Orange or known to have served in Vietnam. Pathologists at VA hospitals have been reminded frequently to submit any and all specimens from Vietnam veterans to AFIP for inclusion in the Register.

Question 4.B. How many names are on this Registry?

Answer. There are now about 1,500 Vietnam veterans on the Agent Orange Tissue Register. Of them, some 1,200 have had their specimens examined in detail without any unexpected results. The types of disease and their relative numbers were the same as those encountered in any similar population.

Question 5. Will the revised Agent Orange Registry code sheet be distributed to those persons who were previously put on the Registry, i.e. before the revised code sheet was developed?

Answer. To recode all prior registry participants onto the new code sheet would be a massive undertaking for all VA health care facilities and would remove valua-

ble personnel involved in direct patient care to perform clerical functions. Information on selected cases will be recoded as the need arises and will be implemented gradually so as not to interfere with patient care.

STATEMENT OF MAJ. GEN. MURPHY A. CHESNEY, U.S. AIR FORCE

Major General (Dr.) Murphy A. Chesney is Deputy Surgeon General, Headquarters U.S. Air Force, Washington, D.C.

General Chesney was born November 29, 1927, in Knoxville, Tennessee, and graduated from Central High School near Knoxville in May 1945. He attended the University of Tennessee in Knoxville from September 1945 to March 1947 in an accelerated premedical program and graduated with a bachelor of science degree. He earned his doctor of medicare degree in June 1950 from the University of Tennessee's College of Medicine in Memphis.

In June 1951 he completed his internship at the Scott and White Hospital, Temple, Texas, and entered private practice as a surgeon and general practitioner at the Edgar Renegar Clinic in Levelland, Texas. A year later he moved to Rule, Texas, where he was associated with Dr. Robert E. Colbert in the Rule Clinic. While residing there he was elected president of the Chamber of Commerce.

General Chesney entered the U.S. Air Force in April 1955, attended the basic orientation course at Gunter Air Force Base, Alabama, and later the primary course in aviation medicine at Randolph Air Force Base, Texas. In July 1955 he was assigned to the dispensary at Portland International Airport, first as flight surgeon and then as commander. He continued to serve as commander when the dispensary became a hospital.

From July 1957 to June 1960, General Chesney was at the University of Tennessee in Memphis where he completed his Air Force-sponsored residency in internal medicine. During his last year of residency he was appointed chief resident and was involved in several research papers and projects. He also served as a university instructor from July 1959 to June 1960. For the next two years he was assigned as chief of hospital services and chief of the Department of Internal Medicine at Homestead Air Force Base, Florida.

In May 1962 he transferred to the dispensary at Ben Guerir Air Base, Morocco, as commander. He moved to the 401st Tactical Hospital, Torrejon Air Base, Spain, in June 1963 and became deputy commander and senior internist.

General Chesney returned to the United States in June 1966 and assumed command of the 852nd Medical Group at Castle Air Force Base, California. He became director of professional services in the Office of the Command Surgeon Pacific Air Forces, in August 1969 and deputy command surgeon in June 1972. While there his duties included supervision of the professional medical care of patients, including combat-injured personnel, intratheater aeromedical evacuation, flight medicine, preventive medicine and bioenvironmental engineering, medical aspects of the drug abuse program and the prisoner of war release program.

In April 1973 General Chesney transferred to Headquarters Tactical Air Command, Langley Air Force Base, Virginia, as command surgeon. He moved to Brooks Air Force Base, Texas, in August 1978 where he was commander of the Air Force Medical Service Center. General Chesney served as director of medical plans and resources, Office of the Surgeon General, Headquarters U.S. Air Force, from January 1980 until assuming his present position in April 1980.

General Chesney is a member of the Society of Air Force Physicians, Society of Air Force Flight Surgeons, International Congress of Medical Astronautics and Cosmonautics and Phi Rho Sigma Medical Fraternity. He is a fellow of the American College of Physicians, fellow of the American College of Preventive Medicine and diplomate of the American Board of Internal Medicine.

He holds the aeronautical rating of chief flight surgeon. His military decorations and awards include the Distinguished Service Medal, Legion of Merit, Meritorious Service Medal, Air Force Commendation Medal, Air Force Outstanding Unit Award ribbon, National Defense Service Medal and the Spanish Cross of the Aeromedial Order of Merit, 2nd Class.

He was promoted to major general February 8, 1979, with date of rank July 1, 1975.

General Chesney is married to the former Mary Ann Wilson. They have four children: Murphy A. III, Charles Allen, Carol Jean and John Lowell.

Mr. Chairman and Members of the Committee, I am Major General Murphy A. Chesney, Air Force Deputy Surgeon General. I thank you for the opportunity to present an update on the progress of the Air Force Epidemiologic Study of Ranch

Hand personnel exposed to herbicides in Vietnam from 1961-71. Our previous presentations to this Committee included information on the use of the herbicides in Vietnam, the development and peer review process of the Air Force study design and protocol, the process of study implementation, compliance figures, program costs and preliminary mortality findings. The basic protocol and study were developed and conducted at the School of Aerospace Medicine, Headquarters Aerospace Medical Division, Brooks Air Force Base, Texas.

The information that I will present today includes final study participation figures, an update of the mortality study, a description of some of the types of morbidity data which will be analyzed and which will be of special interest to this Committee, and the dates on which we expect the reports to be available.

The Louis Harris and Associates contract for in-home questionnaire administration to the study participants was completed on November 15, 1982. Of the 2,878 subjects selected for the questionnaire and physical examination phases of the study, only two Ranch Handers and nine comparison subjects could not be located. Therefore, our location rate for the baseline data base is 99.6 percent (2867/2878), a substantial achievement.

A total of 1,172 or 97 percent of the Ranch Handers and 1,156 or 93 percent of the initial 1,241 comparison subjects participated in the questionnaire. All comparison subjects who declined the questionnaire and/or the physical examination were substituted with willing subjects who were equally well qualified for inclusion in the study. Three hundred seventy-two in-house questionnaires were completed on comparison group substitution to maximize questionnaire and physical examination participation. In addition to the study subject questionnaire, Louis Harris and Associates completed in-home interviews on 2,546 former or present spouses, and 84 next-of-kin to known dead study subjects. They also completed 84 telephone interviews on the population that refused to participate. Thirty-four Ranch Handers and 158 initial and/or control substitutes were classified as absolute questionnaire refusals in the study. Forty-five percent (87/192) of these refusals stated their reason for refusal as "having no time or interest"; 18 percent (35/192) were passive refusals (located but totally nonresponsive); and 14 percent (27/192) refused because they felt that participation could adversely affect their military or civilian careers. The remainder of the refusal population cited factors such as job commitment (25/192), dissatisfaction with the military (14/192) or fear of the physical examination (2/192). However, ill health was cited as a reason by only two individuals, both comparison subjects.

One thousand forty-five (87 percent) of the Ranch Hand population and 940 (76 percent) of the initial comparison population participated in the physical examination. Two hundred eighty-seven comparison substitutions also completed the physical examination prior to the contract completion date on December 15, 1982, for a total of 1,227 comparison participants. Reasons cited for refusal to participate in the physical examination included: no time/no interest (54 Ranch Handers, 159 comparisons); job commitment (29 Ranch Handers, 92 comparisons); passive refusals (9 Ranch Handers and 21 comparisons) confidentiality/active duty (11 Ranch Handers, 16 comparisons); travel/distance/family considerations (4 Ranch Handers, 19 comparisons); fear of the physical examination (5 Ranch Handers, 6 comparisons); health reasons (5 Ranch Handers, 5 comparisons) and dissatisfaction with the military (5 Ranch Handers, 0 comparisons). Overall, the average participation rate was 81.5 percent, (not including the comparison substitutes) which is substantially higher than the 60 percent rate cited in the study protocol. These are very high compliance rates compared to most other major health studies and will enhance the statistical power of our effort.

In September of last year, I presented to this Committee our initial mortality report based on deaths occurring prior to January 1, 1982. The data that I am presenting today is an update of that initial report. The mortality analysis is an ongoing process, and additional deaths will be included in subsequent reports.

As of September 1, 1982, there were 67 documented deaths in the Ranch Hand group: 22-killed in action; 18-accidental deaths; 3-suicides; 1-homicide; 3-malignant neoplasms, 1-endocrine, nutritional, metabolic and immunity disorder; 14-diseases of the circulatory system, and 5-diseases of the digestive system. For the same time period there were 235 deaths among the comparison subjects. The larger number of comparison subject deaths is a result of the 1:5 Ranch Hand to comparison subject mortality study design. The causes of death for this group includes: 91-accidental deaths; 12-suicides; 3-homicides; 34-maiignant neoplasms; 2-neoplasms of uncertain behavior; 1-endocrine, nutritional, metabolic and immunity disorder; 68-diseases of the circulatory system; 11-diseases of the digestive system; 3-infectious and parasitic diseases; 1-nervous system and sense organ disorder; 4-respiratory system diseases;

2-genitoruinary system conditions and 2 ill-defined conditions. No statistically significant differences in the crude death rates were found between the Ranch Hand and the comparison group.

The overall survival pattern of the Ranch Hand and the comparison group was contrasted to the 1978 U.S. white male population vital statistics. Both study groups continue to experience significantly less mortality than equivalently aged U.S. white males, an epidemiologic phenomenon called the healthy worker effect. This effect is due in part to the selection of healthy individuals for entry into the Armed Forces as well as the availability of health care throughout their careers and retirement.

The refined analyses of more than four million pieces of information currently available will account for the effects of exposure patterns, social habits, other medical factors, family history or predisposition to specific diseases, and time spent in Southeast Asia. We are dealing with 2,272—two and one half day long executive physical examinations and 5,330 detailed subject, spouse, and next-of-kin interviews. Analysis of these interrelated factors will improve our ability to properly delineate any adverse health effects of herbicide exposure.

I would like to outline some of the data analyses we are going to accomplish which may give you a clearer understanding of how we will be assessing the overall health of the study population. Those described are major areas of concern expressed by numerous lay and scientific groups and focus on target organ systems identified in the scientific protocol. These include mortality (will be updated in all subsequent reports), assessments of general health (perceptions of both subject and physician); fertility/infertility (fertility index, live birth rates, sperm counts); reproductive abnormalities (birth defects, learning disabilities); cancer (organ specific rates, soft tissue sarcomas); dematologic (chloracne, porphyria cutanea tarda); hepatic (liver functions); sychologic (depression, anxiety, fatigue, anger); neurologic (muscle weakness, coordination, reflexes); and cardiovascular (blood pressures, cholesterol levels, abnormal heart sounds, electrocardiogram abnormalities). There are many other parameters which will also be reported.

This initial round of questionnaires and physicals will form the basis for the remainder of the study. Follow-up examinations will be at 3, 5, 10, 15, and 20 years.

In summary, we have concluded our initial mortality study and have presented an update of that effort to you today. The mortality data will be submitted to the Advisory Committee for review and should be available for public release by 30 June 1983. The morbidity data (questionnaire and physical examination data) will be submitted for review and should be available for public release by early October 1983. We estimate that approximately two months of the interim period will be required to accomplish the necessary review and Federal Register notification for each of these reports.

I would like to reiterate to you at this time the importance and necessity for these data to be appropriately reviewed by the Advisory Committee before premature or public release.

The original Scientific Panel of the Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants, later redesignated as the Agent Orange Working Group by President Reagan in 1981, recommended to the White House in August 1980, that the conduct of the Ranch Hand study be overseen by an independent peer review group.

That recommendation was accepted and the Secretary of Defense was so directed in September 1980. On 31 March 1981, an announcement was made in the Federal Register by the Department of Health and Human Services (HHS) on the formation of the Advisory Committee on Special Studies Related to the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants.

The charter of the Advisory Committee is to advise the Secretary of the HHS and the chair of the Working Group of its oversight of the conduct of the Ranch Hand II Study, provide to the Air Force technical assistance and to provide oversight of other studies when directed to do so by the Working Group. It is chaired by Dr. John Moore, Deputy Director for the National Toxicology Program, Research Triangle Park, North Carolina.

The review of data presented to the Advisory Committee will be made after appropriate notice in the Federal Register. This independent, scientific review is the essence which lends technical validity as well as public confidence in the study.

The questionnaire and protocol were made available to the public upon completion of the physical examination phase. The following reports may be obtained from the National Technical Information Service:

1. USAF School of Aerospace Medicine; Technical Report SAM-TR-82-42, Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicides: Baseline Questionnaires; NTIS ID No. ADA 121285.
2. USAF School of Aerospace Medicine; Technical Report SAM-TR-82-44, Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicides: Study Protocol; NTIS ID No. A 122250.

We will continue to work closely with this Committee, the Veterans Administration, and other Federal agencies in the resolution of the herbicide issue.

I will be happy to answer questions at this time.

WRITTEN COMMITTEE QUESTIONS AND THEIR RESPONSE

Chairman MONTGOMERY. Would you please provide us with the composition of the Advisory Committee as to scientific or medical qualifications and affiliation with the government or private sector?

General CHESNEY. The Advisory Committee is as follows:

Dr. John A. Moore (Chairman), Deputy Director, National Toxicology Program, P.O. Box 12233, Research Triangle Park, NC 27709; Dr. John Doull, Professor, Department of Pharmacology and Toxicology, University of Kansas Medical Center, Kansas City, MO 66103; Dr. Norton Nelson, Professor and Chairman, Department of Environmental Medicine, New York University, School of Medicine, New York, NY 10016; Dr. Alan Poland, Associate Professor of Oncology, McCardle Laboratory, University of Wisconsin, Madison, WI 53706; Dr. Irving Selikoff, Director, Environmental Sciences Laboratory, Mt. Sinai School of Medicine, 5th Avenue and 100th Street, New York, NY 10029; Dr. G. W. Comstock, Professor of Epidemiology, Johns Hopkins Research Center, Box 2067, Hagerstown, MD 21740; and Dr. Richard Monson, Professor of Epidemiology, Harvard School of Public Health, 677 Hunnington Avenue, Boston, MA 02115.

Chairman MONTGOMERY. What aspect of exposure would not have been affected by the Ranch Handers' ability to shower and clean up after a mission?

General CHESNEY. The inhalation exposure would not have been affected. There is little available scientific evidence to support or refute the contention that showering limits or enhances the skin absorption of TCDD.

Chairman MONTGOMERY. How does the typical Ranch Hand exposure compare to a typical ground soldier's exposure?

General CHESNEY. The "typical" Ranch Hand exposure was a repeated, direct skin exposure to large bulk amounts of herbicide on a daily basis over a prolonged period of time. In addition, there was a large amount of vapor inhalation. The Army is currently reviewing the organizational records to determine the frequency of exposure of ground troop to herbicides.

Chairman MONTGOMERY. Did the Ranch Hand personnel, in fact, have the opportunity to clean up immediately following the completion of a mission?

General CHESNEY. While it is true that a change of clothes and washing facilities were generally available at the Ranch Hand bases, informal interviews with study participants revealed that the flight line personnel and aircrew members involved in handling and spraying the herbicides did not normally feel compelled to shower or change clothes immediately after each exposure. They normally finished their workday, and then they would clean up. After each mission, the aircrews were involved in extensive debriefings of the day's mission and preparations for the next flight. They would often supervise the maintenance of the aircraft. The ground support personnel would work until the operational demands of the day were met.

Mr. EVANS. Isn't it true that the National Academy of Sciences, in their critique of your study, stated that the study lacks the statistical power to detect the "uncommon disorders mentioned in the complaints of veterans" as well as for less prevalent diseases, such as cancer, especially at this early date?

General CHESNEY. The National Academy of Sciences (NAS) did criticize the study for its lack of power to detect "uncommon" causes of death. However, this criticism is only valid if the increased risk of disease is only low to moderate and clustering of cases in one subgroup does not occur, a fact that we do know at this point in time. The study will detect reasonable increments in overall cancer rates. With regard to specific cancer groups, the study has limited capability.

Mr. EVANS. Have there been any documented Ranch Hand deaths since September 1, 1982? If so, have these deaths been factored into your mortality calculations?

General CHESNEY. Both Ranch Hand and comparison group deaths have occurred since September 1982, as can be expected in any group of 7500 men ranging in age from 30 to 75 years. The ascertainment process for deaths used in this study is

based upon death reports from four sources. In some instances, it may take up to six months for a death to be reported and recorded, and notification to be received at Brooks AFB. Thus, a fixed point in time must be selected for each mortality analysis report. We have chosen September 1 as the cutoff point in time for this mortality update.

Mr. EVANS. You say there have been three malignant neoplasms in the Ranch Hand group. What specific types of cancers were involved here?

General CHESNEY. The three malignant neoplasms in the Ranch Hand group were: First, one neoplasm of the lung; second, one neoplasm of the kidney; and third, one neoplasm of an unspecified site.

There were also 34 neoplasms in the comparison group.

Mr. EVANS. Could you elaborate on the last sentence, paragraph 2, page 3 of your testimony, where you say that there is "no significant differences in the crude death rates" between Ranch Hand and the comparison group?

General CHESNEY. The reference to "crude death rates" in the testimony is a statistical and epidemiologic assessment of the overall death experience of the Ranch Hand and comparison groups. The "crude rate" is one standard approach to mortality analysis and compares the deaths from all causes in the groups under observation. In the Ranch Hand study, the overall death experience of the two groups was nearly identical; any variations were of minor nature and most likely occurred by chance alone. This is the meaning of the term "not statistically significant."

STATEMENT OF JOHN F. TERZANO, LEGISLATIVE DIRECTOR, VIETNAM VETERANS OF AMERICA

Mr. Chairman and Members of the Committee, I am John F. Terzano, Legislative Director of the Vietnam Veterans of America. I appreciate this opportunity to present before the Committee for the record our views on the status of the Federal Government's efforts to study the health of Americans who served in the U.S. Armed Forces in Vietnam, particularly on those studies which are examining possible long-term adverse health effects as a result of exposure to Agent Orange or other Environmental factors.

Since September 1982, some progress has been made. Limited compensation legislation which urged the Congress to adopt is now being considered by this Committee. H.R. 1961, introduced by Congressmen Daschle and Bonior, and which currently has over 150 co-sponsors, is a responsible forward step and we urge the Committee to report favorably on it.

Second, responsibility for conducting the critical congressionally mandated epidemiological study has been transferred from the Veterans Administration to the Centers for Disease Control. That organziation has begun, with its customary professionalism and diligence, to carry out this work. We have every confidence that the CDC, if given necessary funding and personnel resources, will do a first-rate job. However, like many others in the veterans' community, we are concerned because of the amount of time that has been spent within the Administration in securing final approval of relatively incidential logistical arrangements. We believe it is unacceptable that the Office of Management and Budget or any other part of the Executive Branch should be able, as apparantly had been the case to date, to thwart progress because of bureaucratic paper movement that is incidential to the mission at hand.

We urge the Committee to question closely the commitment of the Administration to assure a sustained high priority of funding and logistical support for this scientific work. Specifically, we believe the Committee should seek from the Administration a clear reaffirmation that funds and personnel resources adequate to support this, and all other related research at the Federal level, are being built into fiscal year 1984 and fiscal year 1985 budget plans. It is unacceptable for this study to be delayed even one week by virtue of internal administrative jockeying between agencies; it is even more unacceptable, given the Administration's repeated public pronouncements of strong support for this work, for middle and lower level budget bureaucrats to frustrate the commitment of the Federal research community in accomplishing the mandate of Public Law 96-151.

Regarding the Agent Orange Working Group, we are confident that Secretary of Health and Human Services Margaret Heckler, based on her long record in Congress as an advocate and leader for Vietnam veterans, will place the highest priority on the Working Group. The Working Group cannot operate effectively without a strong Chair of the overall Group; equally important, an experienced, commited top-flight Federal scientist must take the reins of the scientific panel, so that the ster-

ling effort of Dr. Vernon Houk, who has recently resigned the post because of CDC's assumption of responsibility for the conduct of the epidemiological study, and his predecessor Dr. John Moore, on NIEHS, can continue.

As we have stated repeatedly, VVA is fundamentally committed to the Federal Government's research program and will continue to support it in any way we can. Vietnam veterans and their families and others concerned about these public health issues are counting on the Government to perform creditably. This Subcommittee has a responsibility to assure that the Federal pledge is honorably redeemed. Unfortunately, far too much time has elapsed in getting started. It would be a tragedy of the highest magnitude if, now that progress is being made, the Federal Government were to become complacent and adopt a business-as-usual attitude toward this critical scientific research.

Vietnam Veterans of America appreciate this opportunity to present our views for the record.

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